Towards better sanitation

Clean water and safe sanitation improve everyone’s health and opportunities in life. When people have clean water and safe sanitation, many diseases are less easily spread. However, the World Health Organization has recorded that while nearly 750 million people in the world do not have access to clean water, 2.5 billion people lack access to safe sanitation.

Why is good sanitation so difficult to achieve?

At a national level, sanitation is rarely high on the political agenda. At community level, there can be a poor understanding of the link between safe sanitation and better health, and particularly of the benefits of disposing of human waste safely and ending open defecation. Even when people are aware that better sanitation leads to better health – perhaps they have been told by teachers at school or by community health workers – they can still take a long time to change their habits. As a result, in recent years there has been increasing research into what causes people to change their behaviour. This includes considering how health promoters can work more closely with communities and understand their needs and abilities better.

Those who have traditionally provided solutions to improve sanitation are also questioning the methods used in the past. In the 15 years since the Millennium Development Goals were agreed – including the specific target to improve sanitation – governments and organisations have been developing more successful approaches, which investigate what communities want before suggesting available technologies and solutions.

Should we focus on supply or demand?

Past methods were usually ‘supply-driven’. A supply-driven approach is one where a provider gives a solution. For example, latrine kits and services are donated by government or a non-governmental organisation (NGO), with little or no encouragement for the community to contribute anything. This can be suitable in an emergency context when immediate help is needed, for example in a camp. Otherwise it often leads to many of the latrines being misused or not used at all, because there was no consultation and agreement that they were appropriate. The latrines that are used may not be emptied or replaced when they are full, because there is a lack of technical...
knowledge and support, and a lack of any administrative or financial management. Recent experience has found that ‘demand-led’ approaches are usually more successful, even if they start more slowly. This is because demand-led approaches empower communities by helping them to analyse their own behaviours and explore their needs and possible solutions. Many people, including poor people, are willing to pay for or contribute towards good sanitation that will satisfy their requirements if the technology is packaged and marketed well, and if there is a reliable and affordable supply of parts and services. To help this, the sanitation sector has developed ‘sanitation marketing’. This involves improving the sanitation market, starting by understanding people’s motivations for better sanitation and the barriers they face. A better supply of sanitation services can then be established to meet demand. For example, a demand-led approach that includes sanitation marketing might involve:
- creating a ‘one-stop shop’ for sanitation services (including emptying) so that people do not have to go to different suppliers for different services
- developing a self-financing emptying service that people can pay for in instalments
- training local craftspeople such as builders
- working with schools, clinics and government services
- training community management groups, who will provide ongoing support for the community’s sanitation
- advertising using billboards, flyers and radio
- sharing what is working and what isn’t, so the approach can be constantly improved.

A successful programme will stimulate the local economy and ensure solutions are sustainable.

This issue of Footsteps covers some of the challenges of demand-led approaches from the community facilitator’s point of view.

With thanks to Frank Greaves, Tearfund WASH Lead.

**EDITORIAL**

‘Come back and wash your hands, please!’ I call to my three-year-old son, sometimes several times a day. He doesn’t like the cold water. He doesn’t like it if his sleeves get wet. He finds it difficult to dry his hands. And when looking after him, I sometimes feel like I’m washing my hands every few minutes – after helping him on the toilet, before giving him a snack, after throwing away a tissue he’s used to wipe his nose...

It takes effort to create a habit in a child, and it is even more difficult to encourage adults to change habits, especially when the new habits feel inconvenient. That is why in this issue on hygiene and sanitation we are not focusing on technical solutions, important as they are. Instead we consider what people really want from sanitation (page 3) and how community facilitators help people take the initiative to change their habits and improve their sanitation and hygiene (pages 4–5 and 10–11). Hand washing with soap is an easy, cheap way of improving our health, so we share instructions for how to make soap (pages 12–13) and information about hand washing that can easily be shared with groups as a starting point for discussion (pages 8–9).

Our readership survey showed us that you were especially interested in Footsteps issues on water and sanitation, so we hope that you will be encouraged by what you read here. We would love to hear what you think, so please get in touch. The next issue will also be on a subject that many of you highlighted in the readership survey – HIV.
Household sanitation: myths and realities

Why do sanitation programmes often fail? Here are some common myths about improving household sanitation, followed by explanations of why the reality is different.

**MYTH:** ‘Better health (fewer illnesses) will motivate households to want and pay for latrines’

**REALITY:** Research from a range of countries increasingly suggests that health is not the main reason people install a household latrine. Instead, households invest in a latrine as a housing improvement, and families want increased convenience and cleanliness, status and pride, comfort, and safety (avoiding dangers such as snakes and the risk of sexual attack associated with open defecation and public latrines).

**MYTH:** ‘Without financial assistance most people will not buy a latrine or improve the one they already have’

**REALITY:** People are buying latrines and in fact most latrines have been installed by homeowners with no subsidy. An extremely poor minority may lack the ability to buy a latrine by themselves, but most, with the right choices, knowledge, and perhaps community support, will pay for or build their own latrine.

**MYTH:** ‘The most important thing about a latrine is that the cost should be low’

**REALITY:** There are always trade-offs in decision making, and it is increasingly clear that a cheap latrine that offers poor quality and none of the features the consumer wants will not sell. While the features that people are looking for will vary across cultures, several attributes appear to be particularly important and, to many, worth paying more for:

- minimal sight and smell of human waste
- strong and long-lasting
- easy to clean
- easy to use
- works well without need for frequent maintenance and repair
- minimal embarrassment for women, especially adolescent girls
- safe for children, the elderly and disabled people.

**MYTH:** ‘What stops people improving their latrines is the high cost’

**REALITY:** The high cost of many existing latrine technologies does discourage people, but it is not the only barrier to improving a latrine. Households buy more expensive latrines when the latrines are desirable and when homeowners can pay for their latrines over time. For example, some people can use credit and savings groups or schemes to pay, or the different parts of the latrine could be installed in stages. The overall cost can be also be reduced, if people can do any of the following:

- contribute do-it-yourself labour or materials
- join with others to organise bulk purchases of goods and services
- access government support
- adapt latrine designs.

This article has been adapted from Sanitation Marketing for Managers by Mimi Jenkins and Beth Scott, USAID Hygiene Improvement Project, 2010, p2. The full resource can be downloaded free of charge from the website below or purchased as a book from TALC for £15 (US$ 23, EUR 20) – see the Resources page for TALC’s details.

www.hip.watsan.net

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**Words used in this issue**

- **hygiene** healthy conditions and practices that reduce diseases by keeping people and things clean
- **open defecation** going into fields, the bush or other open areas to relieve oneself, leaving faeces (solid waste from the human body) in the open
- **open defecation free zone** an area that a community has stopped using for open defecation
- **sanitation** the provision of facilities and services for the safe disposal of human urine and faeces (definition: the World Health Organization)
- **subsidy** a transfer of money to help someone do something

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This improved latrine has a vent pipe and a pedestal. Latrine slabs for squatting are also popular and effective.

If using a jug and buckets for hand washing, as shown here, keep the buckets covered when the water is not being used. This will keep birds and animals away, and will prevent mosquitoes from breeding in the water (important in areas where malaria is common).
Helping a community to improve hygiene and sanitation

We asked community facilitator Pratikchya Khadka of Share and Care Nepal about her sanitation and hygiene work. We hope you will be inspired by her experience of respectfully helping people to change their behaviour.

What are the main messages or lessons you share in your training?
I share many things! I focus on the importance of the construction and proper use of toilets, hand washing, avoiding drinking from open water sources, taking showers, cutting nails and hair, the use of safe and clean sanitary pads during monthly bleeding, and maintaining cleanliness inside and outside the house.

What do you do when people do not like something you say in your training?
I give time to them, try to know their views personally and try to persuade them. For example, I was facilitating a women’s action group to help them create their Village Development Committee open defecation free zone. I was telling them about the proper use of a toilet and its construction.

Pratikchya: How many of us have a toilet in our place?
(Members discuss with each other. A few do not have toilets.)

Pratikchya: Why have you not built a toilet yet? The government has a campaign of declaring open defecation free zones. Do you know about it?

Woman: We know. How can we build with no resource? Everyone comes and shares knowledge but they do not provide materials.

Pratikchya: You are right but you might be talking about a more advanced toilet. It is good to have one of those. However, with the use of local materials, we can still build toilets. In your neighbouring Village Development Committee, community members have built pit latrines. That got them into the habit of using a toilet and it compelled them to start saving, so now most of them have more advanced toilets.

We can dig holes and use bushes, plastic, wood or other local materials to build toilets. They will last for some months. If we allow the waste to decompose, it can also be used to make soil fertile and increase productivity.

(The meeting ends with a decision to build pit latrines and support for declaring an open defecation free zone. As a result of the meeting, two members build toilets with local materials.)

If I do not have immediate success persuading people, I approach other family members and influential people in that community who can convince them more easily. I get the support of others, either colleagues or community people, to facilitate if misunderstanding continues.

My priority is encouraging people to develop the habit of personal hygiene and to visit the nearby health post rather than relying on untrained traditional healers.

According to the type of participants, the place and environment, I choose appropriate activities such as songs, dance, games and assignments. We also do practical demonstrations of cleaning and hand washing.

When you do training sessions, how do you help people to feel comfortable talking about sanitation and hygiene?
I stay with people in the community. I spend time with them, talking and listening to them. I often do home visits. These bonds help people to open up when I facilitate training sessions. I am always aware of how important people’s feelings are. In particular, during training sessions, I do not use too many facts and data. I try to make them see for themselves what their health and hygiene is like, in a simple way, using local language. I also try to find out whether people agree with what I am saying or not. If I see someone is finding...
the discussion difficult, I try to talk to him or her individually.

**How do you win people’s trust?**

I present different true stories (case studies) of other communities and other people. In some cases, being a woman, I do share my own personal experience, especially for the sake of adolescent girls and women. I try to be one of them. When educating, I always carry related resource material so that they can see that what I share is supported with evidence.

**How do you identify the people who will build toilets first and work with them to encourage the whole community?**

It does not take us a long time to recognise who will build toilets. It is clear from their eagerness, curiosity and the way they have taken the idea of better sanitation to heart. We encourage the group members to support each other in building toilets. We too participate in construction, doing whatever we can do, either digging or carrying things. We make sure we remember their efforts as a true story or case study that we can share in other groups.

Most of the time, people change their behaviour when they learn with evidence and when they witness the impact. At the initial stage, they should be convinced about the benefits. Influencing elders and respected people is very effective because others will follow their words and their example. However, making people believe that they should and they can take the initiative to change their behaviour should be our first priority.

**Why do people not use soap to wash their hands?**

In my observation and experience, most people know that they should use soap. However, it is not a priority for them and they feel relaxed about it. For example, before eating, few are in the habit of washing. Most people think the extra effort of standing up, going up to the tap, touching cold water and so on is a burden or unnecessary. They think that nothing happens if they do not use soap once, so they prefer to wash their hands only with water. Their attitude is that it is worth worrying about ‘big diseases’ like cancer and Hepatitis, but other diseases are not a big deal. They do not have a culture of hand washing. Furthermore, parents seem least bothered about hand washing and education institutions do not have that facility, so children are growing up without the habit.

**How do you encourage people to continue washing their hands with soap, even a long time after the training?**

I visit the community frequently with team members. We follow up and teach more if necessary. We ask individuals whether they have been washing hands with soap or not and find out what change they are feeling. Sometimes, we give soaps as gifts or prizes and ask for continuous use.

**What tips or recommendations do you have for others doing similar work to you?**

It is never easy to work in a traditionally-rooted community and try to convince them of a way they have never tried before. However, someone has to start for transformation and make the earth a better place to live. I would like to share the following from my experience for people who are doing similar work:

- Respect the work you are in and recognise its significance to improve people’s lives, even if it is just about telling them to cut their nails and wash their hands.
- Understand the community and its dynamics – the types of people, the situation, what interests people – so you can develop effective ways to reach people.
- Focus on a cycle for bringing change in people: give knowledge, make them aware, change attitudes, transfer skills and build capacity.
- Be a role model in your personal hygiene and sanitation.
- Do not expect your advice will be followed at once or that things will change quickly. Failures are pillars of success, so do follow up regularly.
- Remain up to date concerning diseases, new sanitary methods and best practices.
- Importantly, remain passionate, inquisitive, non-judgmental and enthusiastic.

With grateful thanks to Surendra Gurung and Ramesh Khadka of Share and Care Nepal for interviewing Pratikchya and writing up her responses on the Editor’s behalf.

Share and Care Nepal works to improve sanitation and hygiene through non-formal education, street drama, strengthening the capacity of existing groups like Female Community Health Volunteers and Child Groups, and creating speech, song and poetry competitions with topics on sanitation and hygiene.

Website: www.share-care.org

**Ideas for using this article**

- Discuss what Pratikchya says about why people do not use soap. Do you agree that these reasons are common? What can be done?
- What facilitation skills did Pratikchya use? How could you use them in your own training?
From the MDGs to the SDGs

by Anna Ling

The deadline for meeting the Millennium Development Goals (MDGs) is fast approaching. Has the world succeeded in achieving them? And what comes next?

Exciting progress has been made towards the eight MDGs that were agreed by 189 nations in September 2000. The targets were set to be achieved by the end of this year, 2015. The MDGs have inspired campaigning action and have increased efforts to tackle poverty. They have provided a clear focus and have helped to increase commitments to aid.

Sanitation is part of Goal 7 – Ensure environmental sustainability. Target 7c is to ‘Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation’.

Progress

The target to halve the proportion of the population without sustainable access to safe drinking water was achieved in 116 countries five years ahead of schedule. We can celebrate the End Water Poverty campaign, which Tearfund helped to set up, for its contribution to increasing access to improved water for 2.3 billion people between 1990 and 2012.

Huge progress has also been made to ensure all children can attend primary school. Enrolment in primary education in the developing world is reported to have reached 90 per cent in 2010. This means that more children than ever are receiving primary education and girls are not being excluded from the system.

Difficult goals

However, there hasn’t been success across the board. There are three areas where progress has been particularly slow: environmental protection, hunger and sanitation. The facts:

- Global emissions of carbon dioxide have increased by more than 50 per cent since 1990
- There are still 842 million people in the world who are undernourished
- 2.5 billion people are without access to a basic toilet and 1 billion people resort to open defecation.

There are many complex reasons why these targets have not been achieved. For example, global emissions of carbon dioxide are often a consequence of economic development, and open defecation is usually a taboo subject to talk about, which makes it more difficult to campaign on.

What next?

So what will happen beyond September 2015? Member states have agreed to develop a set of Sustainable Development Goals (SDGs). The SDGs will expand upon each of the MDGs and include a new set of goals designed to ensure environmental sustainability.

One of the main criticisms of the MDGs was that because they were measured by averages and proportions, progress was achieved by helping those who are easiest to reach. Therefore, further progress may be much harder to achieve. So it is encouraging that the goal to reduce inequality is due to be included. This will help focus attention where the need is greatest and make sure no one is excluded. It will also address inequality between and within countries, which is a continuing and growing problem.

Advocating for the Sustainable Development Goals

The SDGs represent a global ambition to make sure economic growth is shared by all and does not harm the environment. Real change will happen at a national level, where there will be exciting opportunities to use the SDGs in national-level advocacy.

Here are some ideas:

- Be aware of the new SDGs as they are agreed and monitor to see what progress is being made towards them in your community.
- Highlight to the authorities where the need is greatest and who the most marginalised people in your country or region are, using your work as evidence.
- Push for government funding to be allocated to the most off-track targets, for example: environmental sustainability, hunger and sanitation.
- Use the new SDGs to highlight the work you are already doing in these areas and advocate for your government to help.

For the full list of SDGs see: www.sustainabledevelopment.un.org

Anna Ling is a Policy and Research Associate in Tearfund’s Advocacy team.
Sanitation and cleanliness for a healthy environment
by Jeff Conant
This 48-page booklet offers basic information and learning activities to help communities understand and prevent sanitation-related health problems. Instructions for building several kinds of latrines, as well as ecological sanitation solutions, are clearly presented. Also available in Spanish.
You can download it free of charge from www.hesperian.org, or order paper copies for £6.10 (US$ 9, EUR 8) from TALC (details below).

Encouraging Change: Sustainable Steps in Water Supply, Sanitation and Hygiene (2nd edition)
by S Sutton and H Nkoloma
ISBN 978 0955881 18 3
This publication is a clear and simple field-level facilitator’s guide that assists communities in identifying and implementing practical, low-cost improvements to their water supplies and sanitation. Photographs, illustrations and a CD with 100 A4 posters are included, which fieldworkers can use for teaching and discussion. Also available in French and Portuguese. The full resource is available from TALC (Teaching-aids At Low Cost) as a book, a CD-ROM and as a download.
Cost: £10 (US$ 15, EUR 13) for the book in English and French, £13 (US$ 20, EUR 18) for the Portuguese book, £3 for the CD-ROM and £4 for the PDF download.
To order, email info@talcuk.org or write to TALC, Units 25/26, Thrales End Business Centre, Thrales End Lane, Harpenden, Hertfordshire, AL5 3NS, United Kingdom.

PILLARS Encouraging good hygiene and sanitation
by Isabel Carter, ISBN 1 904364 54 3
This guide offers practical ideas to encourage hand washing, keep food safe, provide safe drinking water and maintain good health. It also includes advice on improving water supplies and building different types of latrines. Also available in French, Portuguese and Spanish.
It can be downloaded free of charge from the TILZ website. To order paper copies, email publications@tearfund.org or write to International Publications, Tearfund, 100 Church Road, Teddington, TW11 8QE, United Kingdom.

Build your own tippy tap
by S Somnath
This illustrated instruction sheet demonstrates how to build your own tippy tap (see page 9). Also available in French, Portuguese, Spanish, Afrikaans, Hindi and Marathi. It is published by Indicorps and available to download free of charge from the Practical Action website, http://answers.practicalaction.org (type ‘tippy tap’ in the search box), and from www.tippytap.org. Instructions for building a tippy tap can also be found in Footsteps 14 (version made from gourd) and Footsteps 30 (plastic container version).

Useful websites
www.superamma.org
The SuperAmma (‘SuperMum’) campaign aims to persuade people to wash their hands with soap. Here they share the approach and the materials that worked with mothers in southern India, to inspire and assist you in your behaviour change campaign.

www.tippytap.org
More tippy tap resources, including videos, photos, posters and songs.

http://wsp.org/toolkit/toolkit-home
Sanitation Marketing Toolkit from the Water and Sanitation Program (also available in French).

www.eawag.ch/forschung/sandec/publikationen/compendium_e/index_EN

http://wedc.lboro.ac.uk/knowledge/know.html
Posters from the Water, Engineering and Development Centre (click on ‘WEDC posters’).

Newer designs of hand washing stations:
The Mrembo (‘the beautiful one’), Kenya: www-old.idsa.org/mrembo-handwashing-station-rural-kenyan-households
The Happy Tap, Vietnam: www.watershedasia.org/handwashing
The Hand Washing Dispenser, South Africa: www.appropedia.org/Hand-washing_Dispenser
Hand washing

Even if our hands look clean, they can still be covered with millions of germs. Germs are microbes that are invisible to the naked eye. Germs on unwashed hands cause illnesses, for example pneumonia and diarrhoeal diseases. Washing hands with soap is one of the most important ways to keep ourselves healthy and stop these germs from spreading from one person to another.

When to wash hands

- Before eating food
- Before, during, and after preparing food (especially after handling raw meat)
- Before and after caring for someone who is sick
- Before and after treating a cut or wound
- After using the toilet
- After cleaning up a baby or child who has soiled himself or herself, or used the toilet
- After touching animals, animal feed or animal waste
- After touching rubbish
- After blowing your nose, coughing or sneezing

Using soap

Many people wash their hands with water alone. However, this is not enough to remove germs. Using soap breaks down the grease and oils on our hands that carry the most germs.

PROBLEMS WITH SOAP USE

Soap left near hand washing facilities often goes missing. It is too valuable a resource to leave around, yet it needs to be available wherever hand washing takes place, in the home or in public places such as schools. Soap on a rope is often the best option. However, it is not enough to have soap in the home. We need to wash our hands with soap at important moments to prevent germs spreading (see box above).

A household bar soap can be used on the hands. A special type of soap for washing hands is pleasant but not essential. If soap isn’t available, then ashes or an abrasive agent such as sand can help cleanse hands.

Think about ways your community could improve local, affordable soap supplies.

How to wash hands

1. Hand washing does not depend on having a tap with running water. Improvisation is the key! A tippy tap, a bowl and jug, and a bore hole are all good options. Running water is best but not essential.
2. The temperature of the water is not important.
3. Wash all hand surfaces: palms, backs, wrists, finger tips and between fingers. The order does not matter.
4. Keep fingernails short so they are easy to keep clean.
5. It is important to dry hands properly before touching anything. Use a clean cloth or shake them in the air.
6. If water is difficult to come by, wash hands whenever the opportunity arises.

Five fingers – count to five

When washing hands, use the number five to help you do it really well.

Wash each surface to the count of 5Aim to wash at least 5 times a day

Children’s activity

You will need paper and pencils or pens

Ask the children to draw round their hands, one hand with the palm down and one hand with the palm facing up. Once they have an outline, they should remove their hands from the paper and draw on fingernails and any lines and creases they see on their hands.

1. Explain how sickness spreads through unseen germs on our hands.
2. Ask the children to look closely at their hands.
3. Ask them ‘where might the germs be hiding?’
4. Ask them to imagine they have put their hands in some soil. Ask them ‘where does the soil stick?’ The answer will be under the fingernails and in the creases of the hands. You could demonstrate this on your own hands with soil, and follow it by washing your own hands with soap so the children can see how it should be done.

On the pictures of their hands, the children should draw where the germs might be hiding. It doesn’t matter how they choose to draw the germs.

Use this activity to help children think about when to wash their hands. Help them understand that their hands need washing when they look dirty and sometimes when they look clean but may have germs on them. Emphasise the importance of washing hands thoroughly with soap to get the germs out of the creases and from under the fingernails.

Tippy Tap

Building low-cost or no cost hand washing stations can help people take the step from simply understanding the importance of hand washing to actually practising hand washing with soap. The Tippy Tap is widely promoted and used for hand washing around the world. It’s simple, cheap, and allows hand washing with only a little water. It is also easily adaptable to suit local situations and preferences.

Other types of hand washing stations are being developed in a number of countries. The design stage is very important.

- Designing a hand washing station must take people’s preferences and practices into account.
- Many tests may be necessary before the best design is found.
- A universal design for a hand washing station may not be possible.
Overcoming challenges in Community-Led Total Sanitation

by Munyaradzi Charuka

It is widely accepted that the success of a Community-Led Total Sanitation (CLTS) process depends mostly on the skills of the facilitator. This is because in most cultures defecation is considered a private, personal activity, which should not be publicly discussed. Facilitators help the community to see and understand the effects of open defecation, and they mobilise the community to discuss it and take action together.

Introducing the idea to facilitators

The number one difficulty I have encountered with facilitation is the resistance by project staff to adopt CLTS as a new approach to sanitation. Often the reason given is that the people are poor and it is insensitive for the organisation to expect them to construct latrines using their own resources. This is the first hurdle to be dealt with.

Project staff also fear losing their sense of purpose, or even their jobs, particularly if the organisation previously supported the beneficiaries with latrine kit subsidies. Accepting the new target of ‘Number of villages declared Open Defecation Free’ as opposed to the previous one of ‘Number of latrines constructed’ can be a challenge for many project staff.

Prompting the community

A way of overcoming difficulties in facilitation at community level is to build relationships with the people and find potential opportunities to talk about open defecation. For example, in Zimbabwe one facilitator remarked to some men that he knew their wives’ bottoms. The immediate reaction was anger and astonishment. ‘How on earth?’ the men asked. The community facilitator explained that he saw the women’s bottoms when they lift their dresses to defecate in the bushes. The men got the message and resolved to construct latrines at their homestead.

In Zimbabwe, during the Christmas holidays, those who stay in urban areas visit their parents and relatives in rural areas. Often they are driving posh cars, smartly dressed and clearly wealthy. I remember one community facilitator telling the people at a Christmas party that those who come from urban areas have modern toilets inside their houses yet they have no simple latrines at their rural homes. She then urged those from urban areas to construct latrines at their homesteads and for their parents as it was cheaper than the twenty litres of petrol required for them to drive there and back. She took the opportunity that came her way to pass on the message. Indeed there was change as families’ relatives from towns and cities started constructing latrines at both their parents’ and their own homes.

In Afghanistan Tearfund encouraged project staff to mobilise people to help each other in CLTS by building on the Muslim practice of Zakat, where those who are economically capable take care of the less fortunate. This worked out very well.

What is Community-Led Total Sanitation?

CLTS encourages people to use resources available in their communities to construct latrines. It also accepts the burying of excreta as a starting point if a family is not able to construct a latrine. The important thing is that the whole community agrees to stop faeces getting into the environment and decides to become ‘Open Defecation Free’.

The CLTS concept and process was described in Footsteps 73. More detailed information can be found in the water and sanitation section of the TILZ website and at www.communityledtotalsanitation.org
Including everyone

In Afghanistan, men and boys participated in the public CLTS process, while female facilitators reached out to the women through household visits. This is important because religiously and culturally, women will not talk where there are men who are accepted as heads of families and therefore take the important decisions. But if the women are not heard, their concerns, fears, and progressive ideas will not be known. I remember in Jawzjan, one of our female facilitators heard women she had met during the CLTS process say that in their community, men were the ones practising open defecation more than women. If men had been present they would not have said that.

The other reason for separating men from women is that CLTS encourages people to talk about defecation practices using crude words rather than polite ones. In this context, such words cannot be spoken when men and women are in the same group.

Working with the government

In Afghanistan, opposition to CLTS came from senior government officials in Kandahar Province. They argued that there was a need to construct public and household latrines on behalf of the people, and that health and hygiene messaging on hand washing with soap was not worth it as Muslims wash their hands five times a day as part of their religious prayers. As a result of this, the project was disrupted by the government officials.

In the end we realised that they did not understand the CLTS concept. While we invested in the training of extension-level government staff, we learnt that we should have equally committed resources to educate the government officials on CLTS for one full day. We learnt that it is important to communicate with senior government staff and work with their blessing.

Munyaradzi Charuka is Tearfund’s Roving WASH Advisor.
Adoption of CLTS and other Tearfund resources on CLTS can be found on the TILZ website: http://tilz.tearfund.org/en/themes/water_and_sanitation/resources

BIBLE STUDY

by Andy Warren-Rothlin

Being clean before God and clean before others

Bad things may come into our lives from germs and accidents or from ‘the world, the flesh and the devil’. And so people try to protect themselves and their families – with blood sacrifices and rituals, with bleach and washing, with insurance and pensions, with ‘doing good’ to gain God’s favour, or with prayer and fasting. Even Christians often struggle to know which strategies to use to avoid bad things happening.

Read Matthew 15:10-20.

As Christians, we know that we have already been made ritually clean by the blood sacrifice of Jesus – this is why we do not need to make more sacrifices or follow rituals for purification. And Jesus has taught us clearly that it’s not outer dirt or cleanliness that matters to God, but the cleanliness of our hearts.

So what is the importance of hygiene?

Hygiene is about how we live on earth. This means firstly our relationship with the whole of creation, which we are to nurture (Genesis 2:15).

But more specifically it means our relationships with others in society – it’s part of that common-sense living that we read about in the book of Proverbs. So if we have come to understand that washing feet (John 13) or wounds (Luke 10:34; Acts 16) is good for our health and our relationships, we should do it out of respect for others.

If I eat with someone, I will wash my hands to respect him. If I sleep with my wife, I will wash my body to respect her. If I have a sickness or am living with HIV, I will avoid giving it to others. In all of these cases, it is not enough to have faith in God to protect me and others, if I do not have love to care for them myself.

This is the ‘golden rule’: ‘in everything, do to others what you would have them do to you, for this sums up the Law and the Prophets’ (Matthew 7:12).

And of course it is common sense to look after even just my own body. ‘After all, no one ever hated their own body, but they feed and care for their body, just as Christ does the church’ (Ephesians 5:29).

We all want to protect our friends, family and ourselves from bad things happening to us. Just as the Israelites were told to build a wall around the edge of the flat roof of their houses to prevent accidents (Deuteronomy 22:8), and we all lock our houses to prevent theft, so we need to wash our hands to prevent disease. By resisting bad things happening in this way, we honour others and so also honour God himself, the source of all good.

Name five ways you can show love and respect for others with good hygiene.

A story about hygiene

Some years ago in northern Ghana, 10-year-old Kuungkaara and his friends were hunting rats in the bush. He put his hand in a hole and was bitten. Thinking it was a snake bite, his family sacrificed chickens to their local gods and wrapped the hand and arm with wet leaves. A week later, when I met him, his hand was black, and the gangrene had almost reached his shoulder. His arm had to be amputated, though the doctor believed it had in fact probably been just a rat bite – it was the dirty leaves that had caused the infection. Now Kuungkaara eats with his left hand, so no one will share a bowl with him.

Why did Kuungkaara’s family do what they did? How can we challenge harmful traditions in our communities with Jesus’ teaching and healthy practices?

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sanitation
Soap making

Making simple plain soap is relatively easy and involves basic equipment. However, there are certain hazards to workers when making soap, which any potential producer must know about. This article, based on a Technical Brief from Practical Action, describes how you can make simple hard soaps that are suitable for many uses around the home, including hand washing.

Ingredients

There are three main ingredients in plain soap:
- oil or fat (oil is simply liquid fat)
- lye (or alkali)
- water.

Soap recipes include salt, because salt is needed to separate the soap mixture. It does not remain in the soap.

Other ingredients may be added to give the soap a pleasant smell or colour, or to improve its skin-softening qualities. Almost any fat or non-toxic oil is suitable for soap manufacture. Common types include animal fat, avocado oil and sunflower oil. Solid fats and ‘saturated’ oils such as coconut, oil palm and palm kernel are more suitable for soap making. ‘Unsaturated’ oils such as safflower and sunflower may produce soap that is too soft if used alone and are not recommended.

Lyes can either be bought as potassium hydroxide (caustic potash) or sodium hydroxide (caustic soda), or if they are not available, made from ashes. For hard soaps, use sodium hydroxide.

Some soaps are better made using soft water (the kind of water that lathers with soap easily without forming any kind of sediment or scum). For these it is necessary either to use rainwater or add borax (sodium borate, a water softener) to tap or borehole water. Each of the above chemicals is usually available from pharmacies in larger towns.

How to make lye from ashes

To make a small amount of lye, use a porcelain bowl or plastic bucket.

1. Fill the bucket with ashes and add boiling water, stirring to wet the ashes.
2. Add more ashes to fill the bucket to the top, add more water and stir again.
3. Let the ashes stand for 12–24 hours, or until the liquid is clear, then carefully pour off the clear lye.

Ashes from any burned plant material are suitable, but those from banana leaf or stem make the strongest lye.

The longer the water stands before being drawn off, the stronger the lye will be. Lye that is able to cause a fresh egg to float can be used as a standard strength for soap-making. The strength of the lye does not need to always be the same, because it combines with the fat in a fixed proportion. If weak lye is used, more lye can be added during the process until all the fat is made into soap.

CAUTION!

Lye is extremely caustic. It causes burns if splashed on the skin and can cause blindness if splashed into the eye. If drunk, it can be fatal. Be especially careful when adding potash and caustic soda to cold water, when stirring lye water, and when pouring the liquid soap into moulds. Lye produces harmful fumes, so stand back and turn your head away while the lye is dissolving. Do not breathe lye fumes. If possible, use rubber gloves and plastic safety goggles (if you do not have rubber gloves, cover your hands with plastic bags, first checking carefully that the bags have no holes). You should also wear an apron or overalls to protect your clothes. If lye splashes onto the skin or into your eyes, wash it off immediately with plenty of cold water.

When lye is added to water the chemical reaction quickly heats the water. Always add lye to cold water in small quantities at a time.

Never add lye to hot water because it can boil over and scald your skin.

Never add water to lye because it could react violently and splash over you.

Because of these dangers, keep small children away from the processing room while soap is being made. Dispose of soap-making wastes carefully outside the house. Do not put them in the drain.

Soap that has just hardened is caustic since the lye has not reacted fully with the fat and become neutralised. This process takes three weeks and is known as curing. When handling soap that has hardened but has not been cured for at least three weeks, wear rubber gloves or cover your hands with plastic bags.
Making hard soap

The method requires three kettles or pans: two small kettles to hold the lye and the fat, and one large enough to contain both ingredients without boiling over.

1. Put the clean fat in a small kettle with enough water or weak lye to prevent burning, and raise the temperature to boiling.

2. Put the diluted lye in the other small kettle and heat it to boiling.

3. Heat the large kettle, and ladle in about one quarter of the melted fat. Add an equal amount of the hot lye, stirring the mixture constantly.

4. Continue this way, with one person ladling and another stirring, until about two-thirds of the fat and lye have been thoroughly mixed together. At this stage the mixture should have the consistency of cream and look the same throughout. A few drops cooled on a glass or ceramic plate should show neither separate globules of oil nor water droplets.

5. Continue boiling and add the remainder of the fat and lye alternately, taking care that there is no excess lye at the end of the process, when the mixture is thick and ropy and slides off the spoon or paddle.

6. Add salt to break up the creamy emulsion (mixture) of oils and lye. The soap then rises to the surface of the lye in granules and looks like milk curd. The spent lye contains glycerine, salt and other impurities, but no fat or alkali.

7. Pour the honey-thick mixture into cloth-lined soap moulds or shallow wooden boxes (the cloth prevents the soap from sticking to the moulds). Alternatively, the soap may be poured into a tub which has been soaked in water overnight to cool and solidify. Do not use an aluminium container because the soap will corrode it. Cover the moulds or tub with sacks to keep the heat in, and let the soap set for 2–3 days.

8. When cold the soap may be cut into smaller bars with a smooth, hard cord or a fine wire. It is possible to use a knife, but care is needed because it chips the soap. Stack the bars loosely on slatted wooden shelves in a cool, dry place and leave them for at least 3 weeks to season and become thoroughly dry and hard.

TO IMPROVE HARD SOAP
Better quality soap may be made by re-melting the product of the first boiling and adding more fats or oils and lye as needed, then boiling again. The time required for this final step will depend on the strength of the lye, but 2–4 hours’ boiling is usually necessary. If pure grained fat and good quality white lye are used, the resulting product will be a pure, hard white soap that is suitable for all household purposes. Dyes, essences or essential oils can be added to the soap at the end of the boiling to colour it or to mask the ‘fatty lye’ smell and give a pleasant fragrance.

SIMPLE KITCHEN SOAP
Dissolve 1 can of commercial lye (sodium hydroxide) in 5 cups cold water and allow it to cool. Meanwhile mix 2 tablespoons (30 ml) each of powdered borax and liquid ammonia in half a cup of water. Melt 3 kg fat, strain it and allow it to cool to body temperature. Pour the warm fat into the lye water and, while beating the mixture, gradually add the borax and ammonia mixture. Stir for about 10–15 minutes until an emulsion is formed, and pour the mixture into a cloth-lined mould to cool.

BOILED HARD WHITE SOAP
Dissolve 0.5 kg potash lye in 5 litres of cold water. Let the mixture stand overnight, then pour the clear liquid into a second 5 litres of hot water and bring it to a boil. Pour in 2 kg of hot melted fat in a thin stream, stirring constantly until an emulsion is formed. Simmer for 4–6 hours with regular stirring, and then add 5 litres of hot water in which 1 cup of salt is dissolved. Test whether the mixture is ready by lifting it on a cold knife blade, to ensure that it is ropy and clear.

Further information
There is additional information available in the full Technical Brief:
- How to make soft soap (cold process)
- How to make large quantities of lye
- How to make tallow (animal fat prepared for use in soap making and candle making)
- Additional soap recipes
- Suggested solutions for common problems with soap making
- List of further resources

The Technical Brief was last updated by Tony Sweetman. Practical Action uses simple technology to fight poverty and transform lives for the better. The full brief can be downloaded from the website Go to http://practicalaction.org/practicalanswers and type ‘soap making’ in the search box.
What works best? Different approaches to changing hygiene behaviour

by Emma Feeny

As with many things, when it comes to approaches to changing hygiene behaviour, one size does not fit all. A method that works in one context is unlikely to have the same results in another.

The SWIFT Consortium is led by Oxfam and includes Tearfund and the Overseas Development Institute (ODI) as global partners, Water and Sanitation for the Urban Poor as global associate, and many implementing partners in Kenya and the Democratic Republic of Congo (DRC). SWIFT is bringing together organisations of all shapes and sizes to encourage hygiene behaviour change in Kenya and the Democratic Republic of Congo.

The advantage of being part of a consortium is that members can pool their expertise and their experiences of what has and hasn’t worked in the past. And involving local authorities, civil society groups and others makes it more likely that activities will be sustainable, as they will be based on common objectives. The process of working together can help to deepen mutual trust.

Learning from experience

One SWIFT member delivered a successful WASH programme (a series of projects on water, sanitation and hygiene) in seven fragile states, including DRC, from 2007–2012. It focused on building capacity through conducting hygiene promotion in communities, establishing school health clubs, training community volunteers and making numerous radio broadcasts. By the end of the project, the targets had been met or exceeded. SWIFT learnt from the success and planned its own activities accordingly.

Changing hygiene behaviour in DRC

When communities in rural DRC were presented with resources such as latrine slabs in the past, without any health and hygiene education to explain their purpose, the slabs were left unused and overgrown, because villagers did not understand the importance of using latrines. A new approach was needed.

In rural areas of Maniema, North Kivu and South Kivu provinces, SWIFT is working to encourage behaviour change through the Villages et Ecoles Assainis or ‘healthy villages and schools’ programme, which is supported by UNICEF and the Ministry of Public Health. The ‘healthy villages and schools’ programme builds on the Community-Led Total Sanitation (CLTS) approach (see page 10), which aims to stop open defecation. CLTS was piloted by Tearfund in six villages in Maniema province in 2010 with great success. The ‘healthy villages and schools’ approach is led by the community with the support of a facilitator trained by a SWIFT member. It is based on a step-by-step process of village mobilisation.

The village first forms a managing committee to conduct a survey of the state of water, sanitation and hygiene practices. It draws up an action plan in consultation with the community, the government public health team and SWIFT’s implementing partner. The partner provides support in putting the plan into action, including training ‘community motivators’ in hygiene awareness and other health issues, providing materials for information, education and communication, and training Water User Committees, which are responsible for the collection of fees for maintenance costs (simple repairs, the fencing of water points, the cost of labour to clean out tanks, the replacement of taps, and eventually the replacement of PVC pipes).

The village has between six months and a year to upgrade its toilets, dig its rubbish pits, organise protection of its water points, and hold sufficient sessions on hygiene to help community members develop the habit of hand washing. After that, the managing committee conducts another survey to assess whether the ‘healthy villages and schools’ goals have been reached. The goals include a significant improvement in the use of

Songs and drama are popular ways of communicating hygiene and sanitation messages, as in this school in DRC.
World Toilet Cup

To mark World Toilet Day in November, SWIFT partner Sanergy and social impact organisation WASH United organised a range of activities for children in Mukuru, an informal settlement in east Nairobi, Kenya. The children took part in a giant board game, rolling a dice and pretending to wash their hands at the right moments to find the ‘Hand washing Champion’. They also competed in a football-themed ‘World Toilet Cup’ (pictured below), which required them to kick a brown ball into a ‘latrine’ (motto: ‘every poo needs a loo’).

Hygiene education for children in Kenya

In rural areas of Turkana, Marsabit and Wajir counties, SWIFT is using the CLTS approach in addition to School Health Clubs, a hygiene-promotion programme for children. This programme uses the Children’s Hygiene and Sanitation Training (CHAST) methodology endorsed by Kenya’s Ministry of Health, and involves interactive learning sessions with children that include puppet shows, role plays, poetry, games, songs and other creative ways of communicating hygiene messages such as the importance of hand washing with soap.

Similar methods are used in urban environments. When SWIFT implementing partner Sanergy installs a ‘Fresh Life’ toilet in a school in one of Nairobi’s informal settlements, it provides a day of ‘edutainment’, a combination of education and entertainment (see box). The toilets, which are easy to maintain and include hand washing stations, are bought by schools for children to use. The waste is collected by Sanergy on a regular basis and converted to organic fertiliser and renewable energy.

Community Health Clubs

Also in rural areas, SWIFT is piloting Community Health Clubs with the support of Africa Ahead. Membership is voluntary, free and open to all, with between 50 and 100 people in each club. Community Health Clubs provide an opportunity for discussion, so the group can arrive at decisions together.

Members take part in weekly, two-hour training sessions on a number of health and hygiene promotion topics, such as the safe storage of drinking water, or making soap to ensure ready availability. Each week they are given practical assignments, such as digging a refuse pit, or making a dish rack to dry dishes off the ground. These are monitored, including through home visits, and members receive stamps and certificates for attending sessions and completing tasks.

Mass media campaigns

In Kenya, in the urban informal settlements of Nairobi, BBC Media Action is working with local radio stations to develop public service announcements based on the strong popular culture found in these slums. This creative process involves using humour, music and drama to spur people to think about, discuss and act on issues around hygiene and sanitation behaviour.

In the rural northern counties, BBC Media Action is supporting local radio stations to create memorable and locally relevant WASH programming through a participatory on-site training approach. Ideas are developed and then tested with groups to check whether they appeal to the target audience. As large parts of northern Kenya have limited access to radio, media output produced by the partner radio stations will be adapted into outreach materials for use by field staff to further disseminate hygiene information.

What will we learn?

The SWIFT Consortium is funded with UK aid under a ‘Payment by Results’ contract. SWIFT did not receive a grant. Instead, funds are released when results are verified by an independent organisation. In addition, outcomes must be sustainable. So the programme must not only prove that it has reached a certain number of people with hygiene promotion messages by the end of 2015, but must demonstrate in 2018 that there is a significantly higher number of people practising hygiene behaviours such as washing their hands with soap.

This continued monitoring makes the programme challenging, but it will provide very useful insights into which approaches have worked best in which contexts. Will Community Health Clubs prove to have a greater impact than the ‘healthy villages and schools’ approach in DRC, for example? Will mass media campaigns using popular culture see lasting change in the slums of Nairobi? And will ‘edutainment’ show itself to be an effective way of encouraging improved hygiene practices among children? By 2018, we will have more learning to share about which approaches may work best in different contexts in future.

Emma Feeny is the Learning and Communications Support Officer for the SWIFT Consortium. For more information, see www.oxfam.org.uk/swift

If you would like to follow the progress of the SWIFT programme, sign up to receive our newsletters by contacting efeeny@oxfam.org.uk.
sanitation

The woman who wanted a toilet

by Milind Ghatwai

When Anita Narre left her in-laws' home because it had no toilet, the residents of the village of Zitudhana were shocked. Defecation in the open was usual even among the few graduates in the village and those who own big houses and tractors, so the new bride's decision made news in the community.

But Anita would not change her mind. If her husband Shivram wanted her back, he had to build a toilet for her. 'I did not do that to become famous. I did what I felt strongly about,' she says. The 24-year-old returned eight days later after Shivram constructed a toilet in their house with the gram panchayat's help (the gram panchayat is a self-governing group for the village).

Anita's unusual determination led to great change in sanitation in the region, doing what years of government campaigns could not achieve, because other women followed her lead and demanded toilets in their homes. Without someone else setting an example, the women say they could never have put their foot down, despite the inconvenience of having no choice but to relieve themselves in the semi-darkness just before dawn and in the early evening.

The signs of change are evident in the village. Most houses in Zitudhana have a toilet or are in the process of getting one. People have learned to joke about their toilet habits, and how the elders feel claustrophobic in the new cubicles because they were used to open-air latrines. 'Earlier, we tried to persuade villagers but they rarely showed any interest. Now, everyone wants a toilet,' says village sarpanch Lalita Narre (as sarpanch she is the elected head of the village's gram panchayat).

Anita spent most of her youth in a town 15 km away from her husband's village. The places are not very different from one another, but her father's house had a toilet. Her father stood by his daughter when she returned home two days after her wedding. 'My daughter was not doing anything wrong,' he said. He was not afraid of people's disapproval, he said, because he was aware of the government scheme to build toilets and was confident that his son-in-law would meet the request. 'I knew Shivram is honest and hardworking,' he said.

Shivram appealed to the gram panchayat for financial help. 'We were more worried that Shivram would feel devastated if people came to know that his wife had left him and he had no money to fulfil her demand,' said the sarpanch's husband Manohar.

The panchayat acted because they sympathised with Shivram, who was raised by his widowed mother, a daily wage labourer. And then, a few months later, all the adults who vote for the panchayat decided to award Anita a small cash prize for raising awareness on an important matter. She dramatically brought the issue of sanitation to everyone's attention for the first time. Since then, she has become an ambassador for sanitation campaigns at district level.

Article adapted from ‘Cleaning Agent’ by Milind Ghatwai, published 26 February 2012 in Endeavour magazine © The Indian Express Ltd. All rights reserved. Please note that the photograph above is not of Anita Narre.

Discussion questions

- It was not a desire for better health that led the people of Zitudhana to change their sanitation practices. What was it?
- Why did the gram panchayat help Shivram build a toilet?
- How important was the support of Anita's father?
- The women in the village wanted better sanitation. How can women gain confidence to take action, like Anita did?

Ideas for using this article

- Read it with a group of people interested in improving sanitation and hygiene. Use the discussion questions.
- Read or retell the story in your own words to women who live without good sanitation. What do they think about what Anita did?