IRC

Hygiene Promotion

Thematic Overview Paper 1

By: Brian Appleton and Christine Sijbesma (IRC)
Reviewed by: Valerie Curtis (LSHTM) and Dick de Jong (IRC)

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Please note that the TOPs are a web-based series. However, we feel that those who don't have access to the Internet should be able to benefit from the TOPs as well. This is why we have also made them available as paper versions.

This TOP is published as a PDF on IRC's website. A summary is made available as web text and will give you an idea of what the TOP is about before downloading the whole document.

Edited by: Brian Appleton

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Each TOP consists of:

- An Overview Paper with all the latest thinking
- Case studies of best practice, if applicable
- TOP Resources:
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  - links to web sites with additional information
  - links to contact details for resource centres, information networks or individual
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TOPs are intended as dossiers to meet the needs of water, sanitation and health professionals in the South and the North, working for national and local government, NGOs, community-based organisations, resource centres, private sector firms, UN agencies and multilateral or bilateral support agencies.

How to make the most of this TOP

IRC's Thematic Overview Papers (TOPs) aim to give their readers two kinds of help:

- Easy access to the main principles of the topic – Hygiene Promotion -- based on worldwide experiences and views of leading practitioners.
- Links to more detailed explanations and documented experiences of critical aspects of the topic on the world wide web.

The audience for whom the Hygiene Promotion TOP has been written is wide. It consists of policy makers, practitioners, educators, trainers and researchers in the fields of health, hygiene, water supply and sanitation, but also those involved in broader programmes for the alleviation of rural or urban poverty.

This TOP may therefore meet different aims of different users: an introduction to, and a rationale for, HP for policy makers and programme planners and managers; access to recent research and case studies for researchers, educators and trainers; information on approaches and experiences of colleagues for practitioners; and opportunities to give your feedback or add your contributions.

The TOP will give you a taste of the great potential that HP has to reduce the sickening death toll from poor hygiene. It will also help in making you aware that there are more effective ways to implement HP programmes, and that not using them can lead to disappointing results and wasted resources. Hopefully, the TOP will also inspire you to advocate and put into practice some of the successful HP approaches described.

1. Hygiene Promotion

What do you know about hygiene promotion? Ask anyone who has been part of the water supply, sanitation and health conference circuit in recent years and you will probably hear something like:

- Changing hygiene behaviour is crucial for healthier lives and to gain the full benefit of water and sanitation improvements;
- Hygiene promotion should be the first element of an integrated programme to bring improved water and sanitation, not a marginal add-on to a technical project;
- Handwashing with soap can reduce the number of diarrhoea episodes by 35%;
- There are not enough hygiene professionals around.

It is encouraging that, thanks to a small group of committed individuals, these key messages have been gaining acceptance in the professional fraternity. It is, though, only a small start on what is needed to bring about the process of hygiene behavioural change around the world. And, the relatively superficial knowledge that even the conference-goers have acquired needs adding to if it is to be put to effective use. A big global advocacy campaign called WASH is now raising the profile of hygiene promotion and improved sanitation as political priorities.

Test out your knowledge about hygiene promotion principles now by trying the TOP Quiz. You may be surprised by the results! Look too at the five main fallacies and seven key principles of hygiene promotion set out in the WELL Fact Sheet (Appendix 2).

Hygiene promotion is not the same as hygiene education. Although education, in its narrow sense of systematic instruction, has a place, successful programmes do not instruct people. There have been numerous attempts over the years to distinguish hygiene promotion and hygiene education by definition. Some are presented in Appendix 5. For a summary of effective and ineffective forms of hygiene promotion, see the Unicef website http://www.unicef.org/programme/wes/pubs/behave/behave.htm
In this TOP, we are more concerned with the aims and the impact of hygiene promotion and we are working with the goal amplified later that:

Effective hygiene promotion reduces the main risky hygiene practices and conditions for women, children and men. It does so in a measurable way, to a significant level, in a pre-set period and within available resources.

Alternative approaches to hygiene promotion programmes with a better chance of success are presented in Making hygiene promotion more effective. Because individual programmes necessarily have limited impact, there are pointers to ways of spreading the hygiene promotion messages more widely in the section on Advocacy. The critical area of how to monitor and evaluate hygiene promotion initiatives is introduced in Criteria for effectiveness.

The Case Studies, which we hope to extend with your feedback, are organised by region. Following them is an overview of participatory methods and toolkits and Top Resources to websites where you will find more information about the experiences of agencies with special expertise in hygiene promotion. For information on organisations that can help you further in your work on hygiene, you may want to go to TOP Contacts. These sections, as well as the others, are interactive. You can add your contribution by using the appropriate forms.

The focus of this TOP is on hygiene practices and conditions in households and the community. School hygiene education is also a vital part of hygiene promotion and there is no doubt that children are powerful agents of change. A separate TOP has been prepared specifically dealing with the subject of school sanitation and hygiene education including its linkages with home improvements and better public hygiene (http://www.irc.nl/page/3580 and http://www.irc.nl/page/3657).

Although our topic is Hygiene Promotion, the discussions sometimes extend into the hygiene implications of improvements to water supply and/or sanitation facilities. Hygiene promotion is important in all circumstances, whether or not it is accompanied by water and sanitation improvements. Indeed, many will argue that it is when water and sanitation services are inadequate that hygiene promotion is most important. However, there is no disputing the evidence that greatest health impacts come from a package of measures that combine hygiene promotion with appropriate improvements to water and sanitation services.

In this Thematic Overview Paper, we look at ways of stimulating wide replication of good hygiene practices. We hope that, after reading it, you will be able to find new ways of working that will support the same goal and will share your insights with us.

2. Why hygiene promotion matters

2.1 Facts and figures

Lots of “facts and figures” have been bandied around over the years to bring home the shameful results of neglecting water, sanitation and hygiene improvements in national development programmes. Some of the statistics have been highly debatable and advocacy campaigns have been jeopardised when the statistical foundation has been shown to be fragile. As part of the WASH advocacy campaign, the Water Supply and Sanitation Collaborative Council (WSSCC) has assembled a collection of validated facts and figures, which can be used with confidence. They paint a powerful enough picture of our dirty world and the death, disease and indignities it imposes on huge numbers of its poorest people. Our global message is stronger if we stick to these validated figures and add to them only when we can substantiate the extra ones.

Let’s look at a few:

- The number of children dying from diarrhoeal disease is equivalent to twenty jumbo jets a day crashing with the loss of approaching 300 lives in each.
- Sixty percent of the population of the Third World, amounting to some 2.4 billion people have no access to hygienic means of personal sanitation; 1.1 billion of them do not even have access to a supply of safe drinking water
- Improved water quality reduces childhood diarrhoea by 15-20% BUT better hygiene through handwashing and safe food handling reduces it by 35% AND safe disposal of children’s faeces leads to a reduction of nearly 40%.

For a fuller list of facts and figures to use in your advocacy for better hygiene, look at Appendix 4 for WASH Facts and Figures.

2.2 Social and economic payback

The reasons for investing in hygiene promotion are both social and economic. They hinge on the health benefits coming from better hygiene, and the payback is high in comparison with the investment needs. Here is a list of why hygiene promotion matters:

- Diarrhoeal disease is the second largest killer of children under five in developing countries and combating diarrhoea is usually the prime reason for investing in WSS improvements. But, it is the combination of improved sanitation facilities and good hygiene that contributes most to reducing diarrhoeal disease. The best justification for this comes from a 1991 paper by Steve Esrey, which includes a version of the diagram, on the following page.

Diarrhoea causes dehydration and kills approximately 2.2 million people, mostly children, every year. Children are more likely than adults to die from diarrhoea because they become dehydrated more quickly. In the past 10 years, diarrhoea has killed more children than all the people lost to armed conflict since World War II. Its occurrence is closely

related to the opportunities that poor people (especially poor mothers) have to improve domestic hygiene (Curtis et al., 2000). Diarrhoeas do not only cause disease and early death in children. They also bring loss of food. This has a negative impact on children's nutritional status. Frequent diarrhoeas stunt children's physical and intellectual growth.

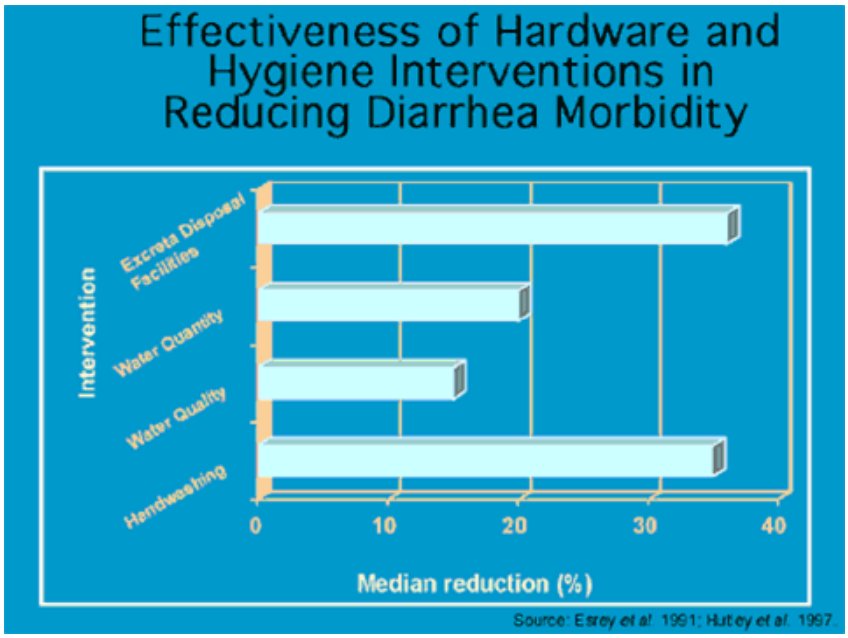

Figure 1. Effectiveness of Hardware and Hygiene Interventions in reducing Diarrhea Morbidity

- Recent research also suggests that handwashing is an important preventive measure in the incidence of acute respiratory infections, the number one killer of children under five. See for instance the study of Ryan et al. published in 2001.
- There are other killer diseases directly and indirectly related to poor hygiene. The 1993 IRC Publication Actions Speak (http://www.irc.nl/page/1836) lists 11 of them and shows how they are linked to various combinations of personal and domestic hygiene, safe water supplies and effective excreta disposal, wastewater disposal and drainage. Trachoma, for example, is the commonest cause of blindness from infections. Presently some 150 million people, mostly children are infected, with 11 million estimated new cases of infection each year. WHO estimates that approximately 6 million cases of blindness due to trachoma and 11 million cases of trachoma infection occur yearly. Prevalence of active disease in children varies from 10-40% in some African countries to 3-10% in several Asian countries. The overall incidence is unknown (http://www.cdc.gov/ncidod/dbmd/diseaseinfo/trachoma_t.html)

- Evidence from health research shows that a lower incidence of trachoma is associated with fewer flies sitting on eyes and more frequent washing of children's faces, along with improved excreta disposal and water supply (Emerson et al., 2000).

- The costs of inaction can be high. Peru's 1991 cholera epidemic is estimated to have cost the national economy an amount equal to US$ 200 million (Bradford and Suarez, 1993). It would have been cheaper to provide the clean water supplies, improved sanitation and hygiene promotion that would have prevented the epidemic and assisted socio-economic development. There are similar examples from India. Outbreaks of plague in 1994 meant a loss of two billion dollars due to import restrictions. On top of that came the loss from thousands of cancelled holidays and public health costs (De Volkskrant, 22 October 1994).

- At the household level too, hygiene-related diseases bring unnecessarily high expenditure. Suffering from diarrhoeas, eye infection and skin diseases (all three hygiene related) meant an aggregated cost of US$ 10-11 per person per year for rural households in Uttar Pradesh, India (Verma & Srivastava, 1990). Investing in hygiene promotion to prevent such outbreaks and reduce regular disease is highly cost-effective (Varley & Bendahmane, 1997). When hygiene promotion is combined with access to improved water supply and sanitation, the estimated cost is only US$ 3 per household per year for each averted case of diarrhoea in children under five. When no water and sanitation facilities are provided, the cost of promoting good hygiene is obviously higher. However, it costs only US$ 6 per household per year to keep a child free from diarrhoea when hygiene is improved without the costs of hardware.

Quite separately from the economic and health arguments, there is a powerful moral imperative to improve hygiene conditions in poor communities. The affront to human dignity of open defecation in squalid stinking home environments is a blight on modern society that shames everyone concerned. The satisfaction of being able to restore dignity and self-respect through simple interventions is an energising reward for the hygiene promoter. See: Water is life ... sanitation is dignity (Sir Richard Jolly, former chairperson of the Water Supply and Sanitation Collaborative Council (WSSCC), http://www.wsscc.org/about/ccnews.php?id=41. See also: Can anyone hear us? Voices of the poor http://www.worldbank.org/poverty/voices/index.htm

Sandy Cairncross and Valerie Curtis of the London School of Hygiene and Tropical Medicine (LSHTM) offer more arguments for promoting hygiene and sanitation (see Appendix 5) in a paper presented at the World Bank Water Forum in 2001 and reprinted on the WSSCC website.

Health benefits from improved sanitation, hygiene and water supply:

1. Improved sanitation;

- 36% reduction in incidence of diarrhoeas from improved excreta disposal;
- 30% reduction in incidence of diarrhoeas in children (3-36 months) in households with flush toilets;
- 15% in incidence of diarrhoeas in children (3-36 months) in households with pit latrines;
- 40% reduction of children with stunted growth in households with flush toilets;

- 26% reduction of children with stunted growth in households with pit latrines;
- Among illiterate mothers, a 7-fold larger reduction in child mortality than with a better water supply;

2. Improved hygiene;

- 33% reductionin incidence of diarrhoeas from improved hygiene practices;

3. Greater water quantity;

- 20% reduction in incidence of diarrhoeas from improved water quantity;
- 50% reduction in 24 hours incidence of diarrhoeas when water collection roundtrip is reduced from +60 to 0-5 minutes;
- 5% reduction of children with stunted growth when the household has water on the premises;

4. Adequate water quality;

- 15% reduction in incidence of diarrhoeas from improved water quality;
- Elimination of guinea worms.

Based on: Esrey, 1994.

The arguments are persuasive and they have encouraged governments, donors and NGOs to attempt hygiene promotion in a growing number of places. Even when the project promoters have the best intentions and good ideas about the right hygiene messages, though, there may be stumbling blocks to progress. Often these arise from invalid assumptions about the community's acceptance of messages, benefits or technologies as being right for them.

3. Learning from experiences and research

3.1 Lesson 1: Hygiene promotion works best when combined with participatory improvements in water supply and sanitation services

It can be argued that hygiene promotion is most important when people lack good water and sanitation services. Certainly that is when health risks are great, especially when there is not enough water easily available for personal and domestic hygiene and excreta are left in the open, in particularly in and near crowded areas and in humid conditions.
People may be able to find enough water to wash their hands frequently and soap may be on sale locally. The aim is then to achieve actual handwashing at critical times: after defecation, before eating and preparing food, and after cleaning the bottoms of babies and toddlers.

But also when water and sanitation facilities are improved, good hygienic habits do not follow automatically. The problems arise when hygiene promotion is handicapped by misguided or inappropriate “improvements” in water and sanitation facilities. Hygiene promotion can do a lot, but it cannot put right mistakes in the delivery of basic WSS services. Water supplies, sanitation facilities and hygiene behaviour work together as an integrated package, and the quality of the approach in all components determines the outcome.

If users find the “improved” facilities inappropriate or unsuitable, hygiene promotion alone can often not persuade them to pay for them, look after them, or make effective use of them. Here a few of the kinds of other things that can go wrong and so counteract the effects of hygiene promotion:

Design is not appropriate
There are so many complex factors involved in selecting the right range of facilities for different socio-cultural settings. Designs that have not been chosen and tested with the community have little chance of acceptance. Foot pumps may be rejected because they cannot be used by children or pregnant women; latrines will not be used in some places if ventilation slits mean that users’ feet are visible; unless latrine slabs can be easily cleaned and water is conveniently available for doing so, they will soon become filthy and fall into disuse.

Sections of the community are excluded
Combating diarrhoeal disease means involving all the community in better hygiene behaviour. In turn, that means finding water and sanitation systems that are appropriate for women, children and men in all socio-economic groups. If any group is left out of the decision-making process, the health impact of the new facilities will be seriously diminished. For acceptance, upkeep and use, programmes and projects need to enable men and women in the distinct community groups to make informed decisions about the

technologies, designs and local maintenance, management and financing arrangements. Users need to understand the implications of each choice in terms of costs, durability, feasibility and the benefits and limitations for socio-economic development and health. Local capacities for maintenance and management must be developed. Only when infrastructure is well chosen, maintained and managed from the perspective of the different user groups can hygienic use be promoted.

Poor drainage at water points creates new health hazards

It is critical that promotion of better personal hygiene should not increase the health risks from other related sources. There is, for example, the danger that encouraging people to bathe at water points may lead to stagnant water pools. They provide breeding grounds for mosquitoes that transmit malaria, filariasis and dengue. In semi-arid areas of India, the number of cases of filariasis multiplied when piped water supplies were installed without proper drainage and drainage management (Wijk, 1998). In the case of malaria, those who have not yet built up their resistance (young children) or have lost it (e.g. HIV-infected women and men and the elderly) run the greatest risks. In Africa, one in four childhood deaths is attributed to malaria. The point here is not that bathing at water points should be banned; it is that the water points should be designed to permit bathing, with appropriate drainage of the wash water. Gender considerations are important too. A project or community rule that simply forbids women from washing at water points for fear of drainage makes no sense when it means that the women have to carry all water for washing and bathing home (where drainage may be inadequate anyway, so the same risks apply).

The important lessons are that hygiene promotion cannot replace participation of the different user groups in the planning and design of community water supply and sanitation projects and that to obtain the optimum benefits from good hygiene, improved hardware has to reach all households in the community. Keeping up coverage is as important for health and economic reasons as it is a matter of social necessity.

EHP has introduced a conceptual framework for ensuring that hardware, software and the right enabling environment are combined in WSH programmes. This Hygiene Improvement Framework, illustrated in the next paragraph, was the topic for an electronic conference in March 2002.

Hygiene Improvement Framework

Field studies have demonstrated that water supply, sanitation and hygiene can each be an effective means to prevent diarrhoea. These studies point to two conclusions. First, improved water quality and quantity prevent diarrhoea, but excreta disposal and handwashing also have a significant impact. Second, interventions aimed at hygiene such as handwashing can have as big an impact in preventing diarrhoeal diseases as hardware.

For those interested it is available in word as well as a .pdf:

- Hygiene Improvement Framework (Word file - 987KB) (http://www.ehproject.org/pubs/globalhealth/hif-bw.doc)

- Hygiene Improvement Framework (PDF file - 419KB) (http://www.ehproject.org/pubs/globalhealth/hif-bw.pdf)

The Environmental Health Project (EHP) has developed the Hygiene Improvement Framework (HIF) as an integrated approach to prevent diarrhoeal disease. This framework has three components: access to hardware, hygiene promotion, and an enabling policy and institutional environment.

HIF E-Conference Conclusions

The Hygiene Improvement Framework is a useful conceptual model for planning and implementing WS&S projects. The three components, access to hardware, hygiene promotion, and enabling environment, are all appropriate.

Health and hygiene efforts can have positive results even when not accompanied by hardware interventions in sanitation and water provision. However, an integrated programme with all three components is the ideal.

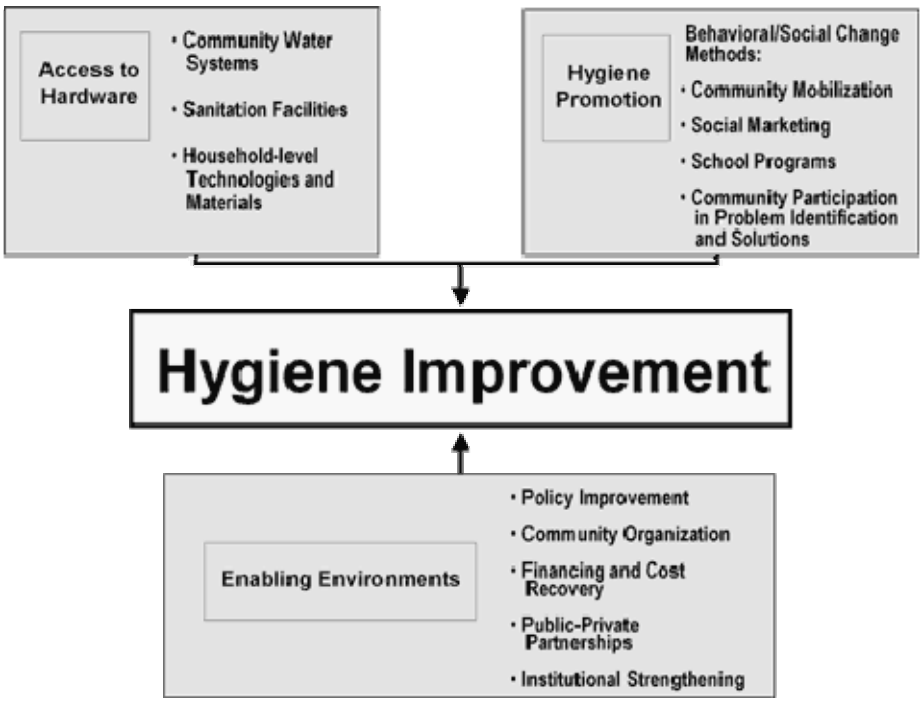

Figure 2. The Hygiene Improvement Framework

The focus of hygiene promotion should be on changing key behaviours. These include handwashing after defecation and before handling food, use of latrines, and keeping water free from faecal contamination. A guide to Improving health through behavior change has now been developed based on work done especially in Latin America http://www.ehproject.org/PDF/Joint_Publications/JP007-CIMCIProcessGuideWeb.pdf

Formative and baseline research at the community level are important to determine what the key behaviours and underlying factors are and to have a basis for determining how to accomplish change and if change has occurred.

Monitoring and evaluation of hygiene behaviour change should be simple and focus on a limited set of indicators.

In order to achieve sustainability and scale-up, national governments must accept hygiene promotion as a part of WS&S programmes and provide the institutional support for an integrated approach.

Institutionalisation of integrated approaches requires a focus not only on national government agencies, but also on institutions at the district and community level. Institutionalisation should include efforts to strengthen both government and non-governmental organisations.

Hygiene behaviour change requires competent and well-trained field staff.
Advocacy is needed to create support at all levels for an integrated approach (See also the TOP on Advocacy http://www.irc.nl/page/34190

Donor agencies can play a major role in the acceptance of integrated approaches by national governments. Donor-funded programmes that emphasize hardware and visible successes can undermine efforts to promote hygiene and sanitation.

Hygiene promotion programmes are best planned on the basis of research on the prevailing issues and views of the target groups (Curtis et al, 2001, Favin et al, 2004). Participatory approaches that involve the community such as the Health Clubs in Zimbabwe help make similar analysis with local communities and are reported to engender a lot of ownership and commitment by the communities and were able to effectively change observed practices (Waterkeyn, 2003)

3.2 Lesson 2: Linking health impacts with social goals

Those who plan, implement, manage and study hygiene improvements often want to promote hygiene by educating people on the links between good hygiene and better health. However, local people themselves often do not see health benefits as the primary reason for improving their hygiene, or for investing in improved water and sanitation facilities http://www.unicef.org/programme/wes/pubs/behav/behav.htm

In holding these views, in many ways they are quite right. The different transmission patterns for different diseases (see Appendix 6) mean that improvements may depend on large numbers of people changing a wide range of risky behaviours and conditions. There is thus the paradox that for the quickest and widest adoption of good hygiene practices it is often more cost-effective to rely on social ambitions rather than health arguments to motivate people to adopt better hygiene. These motivating factors vary for the different

groups, and facilitators of participatory hygiene promotion need to be sensitive to the attitudes and culture of each group.

Those in charge of programmes and projects often have problems in accepting this. They reason that if people know what makes them ill and how to prevent it, they will automatically change their practices, no matter what that will cost them in money, time, conflicts and criticism. It is not like that in the real world. Convenience, status, esteem and financial gain are the stronger driving forces that affect people's decisions on many aspects of their lives.

There are many more concrete and therefore more powerful incentives for water, sanitation and hygiene improvements than the promise of better health. These incentives differ for different groups:

- Women and children appreciate less hardship and more time for rest, play (children) and schooling.
- Men sometimes discount such benefits on the basis that there is no need for schooling of women and girls and idleness breeds laziness. Income-generating potential and peer pressure are more important incentives for the men.
- Among those in the higher socio-economic group, lower groups that are climbing up or aspire to do so, and groups with urban contact, increased social status and following opinion leaders and trends are important motivating factors.
- Willingness to pay for improved sanitation is much higher in densely settled areas than in areas with lots of space and vegetation.

In using motivating factors of the user groups themselves, promoters also need to be aware of countervailing forces. Often, the promoted hygiene behaviour also has certain costs, such as requiring that women and girls invest resources that they are short of, and cannot control, such as time, money and criticism from other family members. For example, mothers-in-law or husbands have commented negatively on wasting water in dry times, or money they spend on good hygiene has been seen as wasteful. In many cultures, women and girls generally already work longer hours than boys and men, and more hygiene work competes with other tasks. They can also often not impact behaviours of other family members. A targeted approach in which the main goals are agreed, and different groups for different practices are identified and are addressed through a family, peer group and community approach on is thus important for durable success.

Specialist health communicators have developed models to try to encapsulate the ways to influence hygiene behaviour while respecting local cultures and beliefs. Two of these models date from 1993, and may need to be updated to take account of more recent experiences with participatory approaches. The concepts though are helpful when planning hygiene promotion activities.

John Hutley relates influences and actions to a BASNEF Model (see table 1). BASNEF stands for Beliefs, Attitudes, Subjective Norms and Enabling Factors. It is an acronym that does not exactly roll off the tongue, but is intended to include all the factors involved.

According to this model, an individual will take up a new practice when he or she believes that the practice has sufficient benefits – health or otherwise – and considers these benefits important. He or she may then develop a positive attitude to the change. Positive or negative influence, or subjective norms, from others in the person's environment who are important to him or her, will also influence their decision to try the new practice.

Table 1: BASNEF Model. The model was first described by John Hutley in 1993.

	Influences	**Actions needed**
Beliefs, Attitudes (individual)	Culture, values, traditions, mass media, education, experiences	Communication programmes to modify beliefs and values
Subjective Norms (community)	Family, community, social network, culture, social change, power structure, peer pressure	Communication directed at persons in family and community who have influence
Enabling Factors (inter sectoral)	Income/poverty, sanitation services, women's status, inequalities, employment, agriculture	Programmes to improve income, sanitation provision, situation of women, housing, skill training

Skills, time and means ("enabling factors") are also required to take up the practice. When the new practice is then actually found to have immediate benefits – a cleaner environment, less hardship, recognition from respected others – it is most likely to be continued. Improved health is seldom such an immediate benefit. It is therefore often not a major reason why the new practice is adopted, although when asked people will often give this reason as they know that this is the expected answer.

In his 220-page book published in 1992 and reprinted with updates in 1993, Neill McKee presents a model that seeks to address what he calls the "anthropologist's dilemma". The concern is that directing people's own beliefs towards practices favoured by the "social marketer" may be seen as manipulative and even reinforcing mistaken beliefs. He addresses too the problem that, although participatory processes can be designed not to favour the better off, they may well favour the better participators, who can then direct investments towards their own priorities. McKee is provocative and challenging with views also on the costs of participation through lost opportunities for productive activities. His model (see Figure 3) links Advocacy, Social Mobilization and Programme Communication in a three-circle "planning continuum". The aim is to combine the benefits of participatory processes to achieve local behaviour change with advocacy and communication tools to mobilise all stakeholders for replication of success and regular repetition of advocacy messages to keep political leadership on board. For anyone wanting to design a full-scale hygiene promotion programme covering a big area, Chapter 5 of McKee's book is a stimulating pointer to the critical issues that need to be addressed.

The diagrams are taken from McKee's book, and are intended to show how social mobilisation links high-level advocacy with local communication efforts. The two-way arrows of the "planning continuum" signify that advocacy is a repeated process and is adjusted and taken up by more and more partners as the programme expands.

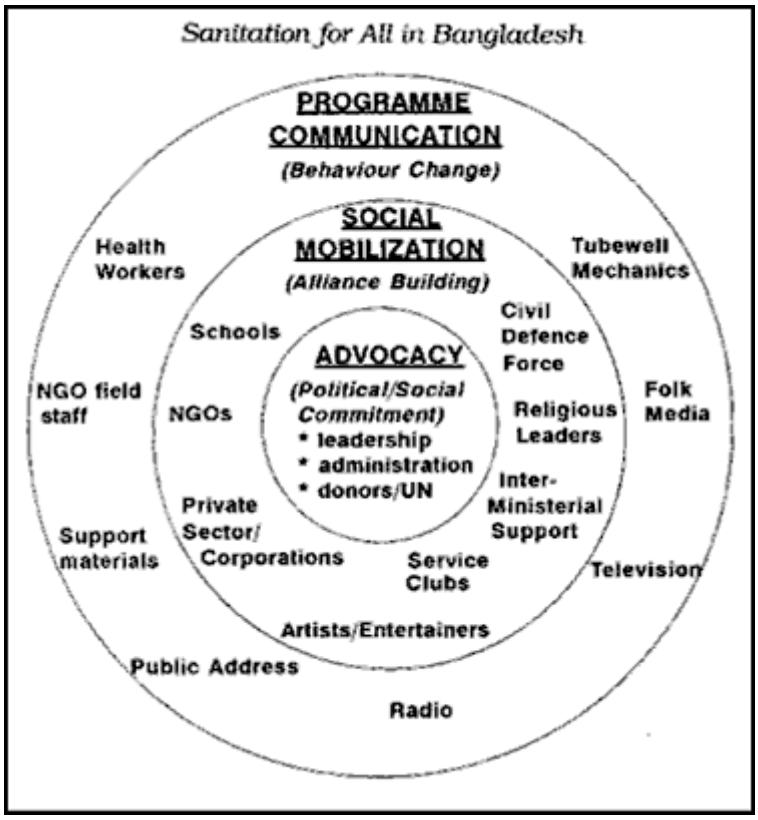

Figure 3. McKee's 'Planning continuum'

The specific example of the Sanitation for All programme in Bangladesh shows the types of organisations involved in the different processes. McKee's model is a generalised one, and needs to be adapted for specific uses, such as hygiene promotion. Nevertheless, its definitions and associations are helpful:

"Advocacy is the organization of information into arguments to be communicated through various interpersonal and media channels with a view to gaining political and social leadership acceptance and preparing a society for a particular development programme. Social mobilization is the process of bringing together all feasible and practical intersectoral social allies to raise people's awareness of and demand for a particular development programme, to assist the delivery of resources and services and to strengthen community participation for sustainability and self-reliance.

Programme communication is the process of identifying, segmenting and targeting specific groups/audiences with particular strategies, messages or training programmes through various mass media and interpersonal channels, traditional and non-traditional."

3.3 Lesson 3: One-way health information campaigns can waste resources

Mass campaigns can be helpful in getting across key messages to a wide audience. To be effective, though, they need good planning to test whether the messages reach, and meet the interests and means of, the chosen audience segments (e.g. poor women and men in different age groups). Unfortunately, there have been lots of "hygiene promotion programmes" that consist only of disseminating health information material and messages as widely as possible. The 'campaigns' may use printed materials such as brochures, pamphlets and posters. Or information may be broadcast via the press, radio, television, folk theatre groups and wall paintings. The costs of such campaigns are relatively high when balanced against their effects at the community level, for several reasons.

Poor people in general, and poor women in particular, have the lowest levels of literacy, so printed materials do not reach them. They do have increasing access to television, but the programmes then need to be carefully timed to reach the different groups and be targeted to their interests and resources. Radio is a medium with a wide approach, but transistor radios are often owned by the men in the family who may take them to their work.

Messages that are primarily "do's and don'ts" can be frustrating and demoralising for the poor. This is particularly true where they urge actions that are unrealistic for poor families. It only emphasizes the sense of powerlessness, to be told:

- "Wash hands with soap" (ash or clean mud may be more available options)
- "Boil water before drinking" (energy cost)
- "Use more water for washing and bathing" (who carries it?)
- "Do not keep food unless it is refrigerated" (thanks for the fridge!)

UNICEF's Facts for Life include seven "key messages" about hygiene that are not patronising or elitist and that can be easily incorporated in a well-designed advocacy campaign at all levels. The messages, repeated here for convenience, are backed by supporting information on the Facts for Life web pages http://www.unicef.org/ffl/09/

- All faeces should be disposed of safely. Using a toilet or latrine is the best way.
- All family members, including children, need to wash their hands thoroughly with soap and water or ash and water after contact with faeces, before touching food, and before feeding children.
- Washing the face with soap and water every day helps to prevent eye infections. In some parts of the world, eye infections can lead to trachoma (see Appendix 7), which can cause blindness (make sure soap is available at least for this purpose).
- Only use water that is from a safe source or has been purified. Water containers need to be kept covered to keep the water clean.
- Raw or leftover food can be dangerous. Raw food should be washed or cooked. Cooked food should be eaten without delay or thoroughly reheated.

- Food, utensils and food preparation surfaces should be kept clean. Food should be stored in covered containers.
- Safe disposal of all household refuse helps prevent illness.

A well-planned campaign can help to raise general awareness of such key messages. Being aware of the 'seven messages' is, however, not the same as practicing them. And practicing is what needs to be achieved. So, the broadcast messages need to be accompanied by local motivational efforts seeking to identify and promote the reasons why the different user groups (and not the promoters!) would want to practise these behaviours and the means they have for doing so.

4. Making hygiene promotion more effective

4.1 Approaches to hygiene promotion

How can we judge the effectiveness of hygiene promotion? A useful general goal is: Effective hygiene promotion reduces the main risky hygiene practices and conditions for women, children and men. It does so in a measurable way, to a significant level, in a pre-set period and within available resources.

Look at the TOP Resources to see what others have done or are recommending as ways of achieving this goal. For more specific examples of case studies in your region of interest, look at Case Studies by Region. Read on for a summary of approach options in hygiene promotion, focusing either on long-term capacity building programmes for self-planned and managed locally specific hygiene improvements or shorter-time and widespread programmes with limited and shared objectives.

Although there are many variations in hygiene approaches, many can be grouped somewhere on a continuum as depicted in the table below. In practice, few programmes will be at either extreme of the continuum, but use elements from both strategies, depending on what they want to achieve, with what means and over what period.

Table 2: Continuum of approaches to hygiene promotion

Short term intensive	**Long term broad**
Few and identical objectives for large populations	Number and type of objectives more diverse and may be set locally
Emphasises mass implementation using mass media and personal contacts by promoters	Emphasises community capacity building for self-implementation. Programme agency or agencies are in charge. Communities are in charge, 'own' their local programme incl. under outside programme
Targets specific improvements of specific groups	Programmes to improve income, sanitation provision, situation of women, housing, skill training. The model was first described by John Hutley in 1993.
Programme has carried out formative research	Formative research by community members
Specific skills requirements are communication and marketing	Specific skills requirements are community organisation and gender and poverty sensitive approaches
Requires research for design and baseline and periodic access and impact studies and periodic adjustment of longer-term campaigns	Requires field staff who can visit regularly and compare results against cost over long periods
Costs can sometimes be shared with the local private sector	Little information about cost-effectiveness as compared with shorter, subject specific programmes

Subject, scope and community control

Guides for developing hygiene promotion programmes that are closer to the left end of the scale are those by Curtis and Kanki (1998) and Favin et al (2004) and closer to the right hand side (Harvey et al, 2002) can be found at the following websites:
http://www.unicef.org/programme/wes/pubs/hyg/hyg.html
http://www.ehproject.org/PDF/Joint_Publications/JP007-CIMCIProcessGuideWeb.pdf
http://www.mvula.co.za/resources/reports/Guide_for_Participatory_Appraisal,_Monitoring_and_Evaluation.pdf

4.2 Universal hygiene promotion programmes with a limited number of common objectives

Sometimes, governments or others concerned with inadequate hygiene want to target a few crucial conditions and practices that have a great impact on health. This may for example be handwashing with soap, or effective soap-substitutes, at critical times to lower the mortality and morbidity from faecal-oral diseases. Or it could be frequent washing of eyes to reduce the number of eye-infections and bring down the percentage of people who become blind.

Hygiene promotion programmes that promote a few selected hygiene changes in a limited time have been called public health communication programmes because of their strong focus on two-way communication. They are also sometimes called social marketing because they make use of marketing principles and strategies to achieve social goals. For a more detailed description, and an example of this approach used in Guatemala, read the WHO publication New directions for hygiene and sanitation promotion
http://w3.whosea.org/rdhome/rdspeech/314envt.htm

It is also instructive to read The Silent Murderer. It describes the promotion programme in West Bengal to prevent poisoning from drinking handpump water contaminated with arsenic, which achieved very wide publicity. Another initiative is the Global Public-Private Partnership to Promote Handwashing. In this partnership, local soap industries and support organisations in the water, sanitation and hygiene sector collaborate to promote the use of cheap soap for handwashing. A first campaign was held in Central America. New campaigns are now planned in Ghana and Kerala, India. More information is available here http://www.wsscc.org/dataweb.cfm?edit_id=57&CFID=897367&CFTOKEN=13979283 or ask for more information from the Water Helpdesk in the World Bank, whelpdesk@worldbank.org.

Public health communication aims to have a positive influence on the health conditions and practices of large populations. It reaches out directly to individual households and persons in these households through a combination of mass media and interpersonal contacts.

The key principles are debated in the McKee references already described in chapter 4. One of the most important elements is limiting the target condition or practices.

Large programmes need to focus. They therefore target only one or two specific conditions or practices that constitute a particular risk. Examples in water or sanitation programmes are:

- safe methods of human excreta disposal
- proper handwashing habits by all at critical times
- only using safe water sources, at least for drinking and food preparation
- frequent washing of children's eyes

For expansion of reasons why these particular messages are important see Appendix 8.

Tailoring the programme

The people targeted in public health communication are not one homogeneous group. They consist of older and younger people, women and men, people with different class, ethnic and religious backgrounds, living and working in different environments. Although the primary targets will be those carrying out the risky practices (e.g. mothers, schoolchildren, child carers for e.g. handwashing, adolescent boys who may not use toilets), it is also important to reach others who can influence how they behave. So, fathers, mothers-in-law, neighbours and social contacts are “secondary” targets for messages that may exert peer pressure. Then come the opinion-formers and people in authority in different walks of life. Teachers, religious leaders, government officers, politicians and community leaders are the “tertiary” targets for messages which improve their understanding of health impacts and other benefits from specific behavioural changes. Each group has its own and often different interests, responsibilities, skills and resources. The nature and places of risks, and possibilities to reduce risks are also different. Most importantly, the channels for communication will be different for the different groups. Some segmentation is needed with all target groups, whether primary, secondary or tertiary. Segmenting the user groups is also a repetitive process. It happens in the preparatory studies, the planning and implementation of the strategy, the monitoring and readjustment, and the final evaluation. Assemblies and meetings are not an effective way for reaching poor mothers as they seldom go to general gatherings. However, they may well be an effective way of giving health messages to politicians and government officials.

McKee describes the process of bringing people together on the basis of their own interests and willingness to act as Social Mobilisation. Unfortunately, in practice, it is not uncommon for social mobilisation to become a form of manipulation whereby some paid staff in external agencies muster local people and groups as volunteers to help them reach their internal goals and targets. That should be avoided; it is the informed opinions of the groups that lead to successful programmes.

When planning a hygiene promotion programme, defining the answers to six questions is central. The answers need to come not just from the health and communication specialists, but also from the different user groups in the programme area:

- What are the risk practices of the different groups, including as seen by them?
- Who are the primary, secondary and tertiary target audiences?
- What can motivate behaviour change of the target groups?

- What may prevent this change in each target group?
- How can different target audiences be reached and involved?
- How do we measure the effects, and the cost-effectiveness, of the programme?

There are many different reasons why people want better hygiene facilities and practices: to live in a cleaner environment, more convenience, less work, more status, self-respect, raised value of the house, better life for children, more safety at night, more safety for women and girls, more privacy, lower risk of witchcraft, less opportunity for adultery, lower walking distance, protection from bad weather, solving problems of sick or elderly relatives (parents), improving sanitation or hygiene provisions as a condition for marriage, following an example by neighbours or admired others, responding to pressure from others, meeting needs of visiting relatives, etc. Different groups have different reasons. Finding out what messages are best for which groups helps design better programmes.

4.3 Community-managed, locally specific hygiene promotion programmes

Governments and others concerned with inadequate hygiene may also want to develop the capacities of local governments and groups to plan and manage their own action programmes for better hygiene practices and conditions in their locations. In community-managed hygiene promotion programmes, a representative local organisation manages the planning and implementation of local hygiene promotion activities. The programme may have a range of objectives:

- Immediate: to mobilise community resources and build capacities to identify and measurably reduce risky conditions and practices and strengthen positive ones of people's own choice.
- Longer-term: to reach and maintain a level of hygiene that is acceptable to the women and men of the community and that cuts out, or significantly reduces, the previously existing risks of disease transmission.
- Ultimate: to empower communities to solve their own hygiene problems and reduce the local incidence of, and mortality from, water and sanitation related diseases.

In addition to direct hygiene and health related objectives, there may also be wider developmental objectives: strengthen the sense of community and community action, increase the analytical, managerial and problem solving capacities of community members, reduce inequalities between genders and social and economic groups, enhance self-confidence and self-respect of various groups, including those that are disadvantaged or marginalised.

Community-managed hygiene promotion programmes are best undertaken with relatively well-organised communities with active leaders and their own resources. The communities need not be homogeneous and well off, but unity and solidarity have to be sufficiently strong. Otherwise, interested communities may first need to demonstrate that they can form active organisations and effectively manage some form of locally initiated change. A ‘community’ may vary from a single neighborhood or village to administrative clusters

covering a number of distinct settlements. In the latter case, there are often two organisational layers:

- The organisation at the neighborhood or village level organises the participatory planning, implementation and monitoring;
- The organisation at the overall community level manages the overall programme, dealing with such aspects as aggregation or co-ordination of lower level plans, contracting and procurement, financial management, and accounting for their work to the contributing male and female heads of households.

Representation

Community organisations that manage local hygiene promotion must represent the different interest groups and capabilities in their neighbourhood, village or larger settlement. Typically, members are women and men from the different socio-economic, ethnic and religious sections with a good range in ages and skills. The groups to which they belong choose them for their commitment, trust, time, relevant expertise, traditional and modern, in health and hygiene.

Should organisations for locally managed improvements include political leaders and government functionaries? The latter can be of great help but can also dominate decisions and monopolise benefits. The solution depends on local conditions. They may be respected and represent the interests of all. Otherwise, some kind of checks and balance is needed. Political leaders and functionaries have also sometimes become ex-officio members, or the organisation that manages the hygiene improvements is a sub-committee with its own status and authority under a local government body.

4.4 Useful materials, methods and tools

Working with materials

Materials and equipment for hygiene promotion cost a lot of money. Contrary to what is often thought, good programmes do not necessarily need to spend most of their budgets on the development and production of materials. They decide what they want to achieve and how, and then decide which techniques, tools and training are needed, which of them are already available and which gaps need to be filled. Often, there is already quite a bit of hygiene promotion material available with a range of programmes and agencies, but much of it may be sitting in offices.

Hygiene promoters do need promotion materials, for their work and to give them an element of status with those they are motivating. Knowing how to work creatively with hygiene promotion and education materials and having access to materials and tools that are flexible and adaptive is more valuable than having a set of standard booklets and posters. Many hygiene promoters who work with local groups also have technical skills that include:

- the ability to use locally available natural or low cost materials for producing implements and products for better personal and domestic hygiene such as, in rural

areas, slabs and sanplats for latrines, wickerwork lining and dried bricks for latrine pits, pots for water filters and sticks for drying frames;
- the ability to facilitate local women and men on using natural local materials such as small pebbles and seeds, and low cost material such as brown paper and felt tipped pens to prepare maps, charts and matrices with which they can map out local conditions and practices for problem identification, analysis, planning and monitoring.

Participatory methods and tools

Participatory methods and tools are a great help in informed planning and decision-making. They help not only to plan and monitor the implementation of hygiene improvements, but also to plan and monitor performance of management organisations and financing systems. Methodologies exist that utilize locally available no cost material, e.g. PRA/PLA and MPA or ready-made kits such as PHAST (Appendix 10, 11 and 12). For more on participatory tools go to Appendix 9. Cautions on use and costs mentioned above are also valid for programmes that promote community managed hygiene improvements.

Two examples of participatory techniques and tools in community-managed hygiene promotion programmes:

- *Forming a management organisation*

In community-managed hygiene promotion programmes, the presence of a well-functioning, capable, representative and trusted local organisation to manage the programme is crucial to its success. The technique described here helps to form such an organisation, or to see if an existing organisation could be adapted. In an open meeting, women and men discuss the tasks of a water, sanitation and/or health and hygiene committee. For each task, they make a small drawing, write a card (if people are all literate) or choose a life symbol, such as a coin for financial management. They also list, draw or choose symbols for the kind of characteristics and expertise committee members need to have, e.g. live in the community, have time, have consent of husband. A third aspect they consider is which groups the members must represent, e.g. come equally from a red (better-off), blue (middle class) and green (poorer) household. The group thinks of candidates and decides which women and men meet their own criteria and are likely to make a good committee. The group, or local leaders, approach these candidates and a committee is formed.

- *Welfare classification*

This tool helps to integrate attention to poverty in the inventory, analysis, planning and implementation of local community-managed hygiene promotion programmes. First the participants make drawings of a better off, a worse-off and an in-between household. They then list the characteristics of each group. They also count how many of the households in their area fall in each group. For this, they distribute the same number of beans as there are households in their area over the three drawings. They use the information to identify which houses belong to which group and mark the results on their map. They use the information also to decide if the committee is representative. Alternatively, they use the information to make a summary table. The three socio-economic groups become the rows.

The two columns are labelled ‘haves’ and ‘have nots’ of an improved facility. The number of owned facilities are distributed over the cells with the help of beans, one per household. The outcome shows who is worst-off and may need help.

For community planning, implementation and monitoring, many other participatory tools/techniques are available (Appendix 9). Social marketing programmes tend to use group-adjusted audio-visual and printed materials for information and knowledge and back these up by interpersonal contacts to achieve behaviour change. These contacts are often through home visits. However, one can also work in homogenous groups and use participatory tools. A growing number of such tools for hygiene work are available (See TOP Resources).

A word of caution

Criticism on the use of participatory tools (Cornwall et al., 2001) also applies to their use in hygiene promotion http://www.ids.ac.uk/ids/particip/information/recentpubkn.html Especially in the case of investigations, there is a tendency to use participatory tools extractively, to meet the agency's need for the data, and not to assist the communities to assess, analyse and plan.

Participatory tools and techniques for investigations are not one-time add-ons in the initial stage to programmes that thereafter remain the same. They link to the use of participatory approaches in all other stages of projects and programmes and shift power from the promoter to the community members.

Use of participatory tools can also become a pseudo-participatory ritual when facilitators do not consider and adjust to local situations, and where they direct and dominate, rather than facilitate, group sessions. Facilitators must have the right personal aptitudes and attitudes for participation and be sensitive to gender and social equity.

Dropping habits of one-way, top-down hygiene instruction does not come easy. It cannot be learned in a short training course of a few days or a week. What seems to work best to change mindsets and build up different skills and attitudes is hands-on experience under the guidance of someone who is well versed in participatory techniques and equity issues. It means creating the conditions for equal participation of women and men, including those from poor and marginal groups in and during sessions, and specifying in the tools themselves how the different and often inequitable division of work and decision-making between the sexes, and class differences may directly limit the good results of hygiene promotion programmes.

Gender and social inequities that affect hygiene promotion

Women and the poor often do not have the same opportunities as men and local elites to attend meetings for information, planning or evaluation. The same goes for participatory tool sessions. In meetings and sessions, women and the poor keep in the background; men and elites dominate, unless the facilitators have the right techniques to overcome inequalities and hierarchies. If women or the poor voice knowledge and views, they are

often not taken seriously and their contributions, however valid, have no impact unless the facilitators are able to handle such situations.

Men and women in the different community sections and professions have different responsibilities and do different types of work, also in hygiene. Their knowledge, health risks and domains of influence are therefore also different. Access to resources (time, money, information, contacts) and capabilities (skills, training) is different for the different community groups and for women and men within these groups. This influences who can do what when improving hygiene. Often, only complementarity of activities can ensure results.

For men and women, mapping out time spent over 24 hours by sex and age (differences start with children of around 5/6 years) is often an eye opener. It helps men to understand why it is difficult for women and girls to take on extra hygiene work, unless they get help or tools that lighten the work.

The feasibility of practising improved hygiene is influenced by whether those who will practise the better hygiene are also the ones who get trained, make the decisions and have the means. An analysis can show that discrepancies and hierarchies exist which make better practices unlikely unless the programme strategy takes such differences into account.

4.5 Effectiveness and costs

As we have seen, general hygiene information and instructions are by themselves not effective to achieve good hygiene practices. Hygiene promotion approaches are likely to be more effective when they:

- target specific practices and conditions that large groups want to achieve
- are based on finding out what women and men, girls and boys in the different community groups know, want and do
- recognise that changing practices depends on a complex set of social and psychological factors
- account for gender, class, ethnic, religious and other socio-economic and cultural differences
- involve women and men, girls and boys from the different community groups in planning, implementation and evaluation
- can demonstrate effective change over time and place
- provide the necessary resources while keeping a balance between investments in material production and the rest of the budget
- build the required capabilities of staff and management in an enabling organisational context
- are sustainable and replicable in approaches and results
- can be taken to scale
- account for inputs, costs and outputs/outcomes

The more effective programmes specify what they do (activities, capacity building), with whom (the different groups in the communities), for what purposes (short and long term objectives and the possibilities to demonstrate their achievement), with what means (staff and staff composition and capabilities, time, funds and physical infrastructure) and in which enabling context (organisational policies, structure, culture, management), how (with which methods, tools and techniques in implementation, training, materials development and testing), and to what effects (demonstrated immediate outputs and outcomes as well as longer-term results and impacts). Figure 4 (next page) gives a summary of the components in evaluating a hygiene promotion project or programme.

4.6 Inputs, duration and achievable outputs

Inputs

The basic inputs for hygiene promotion programmes that focus on demonstrable effectiveness include not only hygiene promotion workers and their materials, but also a substantial research component or if so wanted, assessments using visual participatory methods. They are carried out at the start for planning and continues for adjustments. Other substantial inputs in general hygiene promotion programmes are for designing, testing the materials with the different target groups, and the costs of the media and development of materials.

Hygiene promotion programmes further need support from staff who have the right attitudes and skills for helping people to organise representative and influential community groups and who can build these groups' planning and management capacities. Moreover, in many cultures there are great advantages in having a mix of both sexes and age groups: female adolescents and women to work with their peers among women, and similar males to work with different groups of men. Such persons are not always easy to find. However, also people other than health workers can become facilitators. Programmes in Bolivia, Niger and Guinea-Bissau trained teachers, community leaders, community development workers, NGO workers and agricultural extension workers of different sexes.
http://www.lboro.ac.uk/well/resources/%23%23fact-sheets/fact-sheets-pdf/shb.pdf

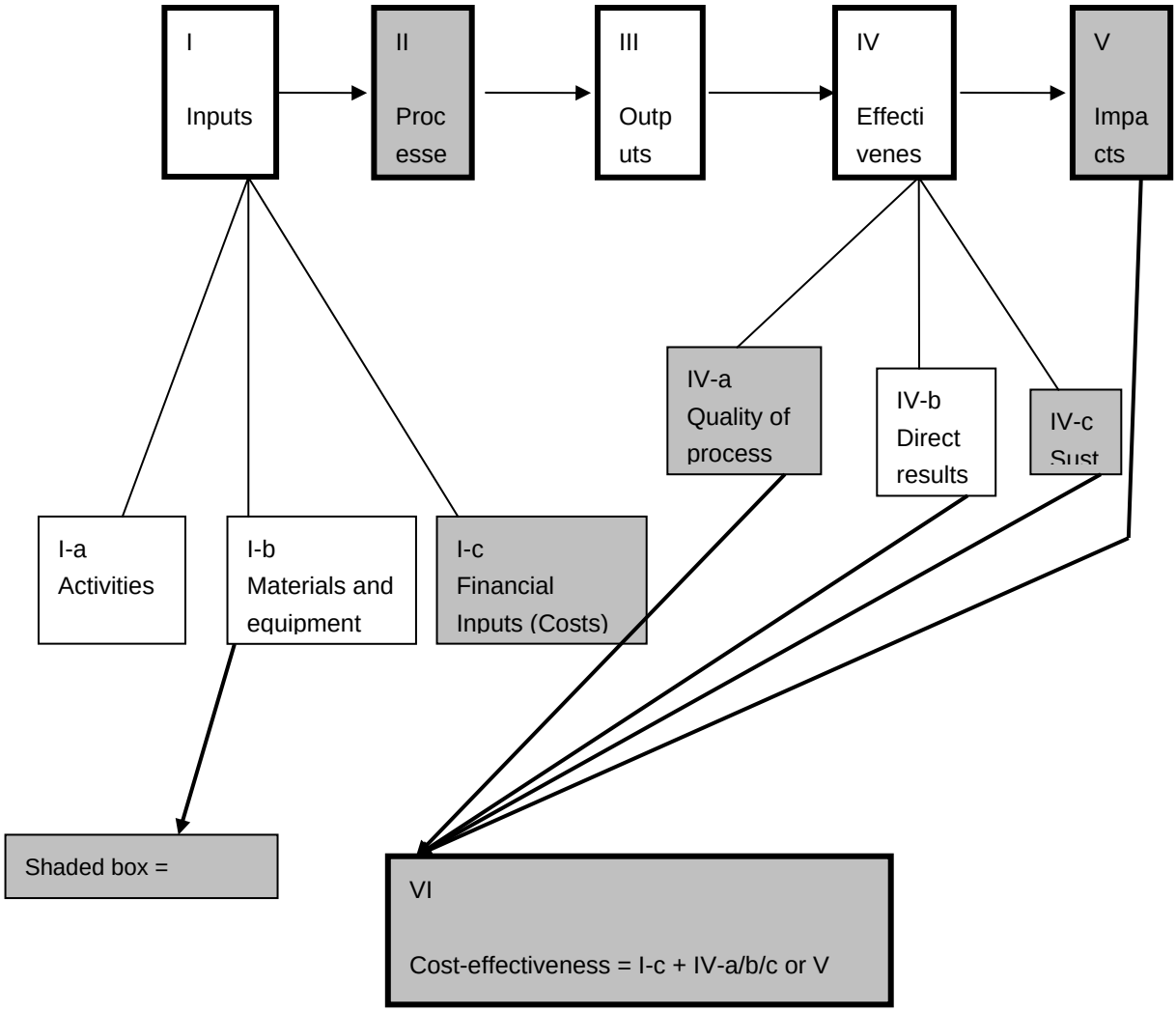

Figure 4. Position of cost-effectiveness analysis in the overall structure of a hygiene promotion intervention

Staff will usually need a capacity-building programme of their own to get the right blend of skills, attitudes and knowledge. Short-term training programmes and easily accessible do-it-yourself training materials, such as Happy, Healthy and Hygienic (Curtis & Kanki, 1998) provide a way to update capabilities.

Training apart, hygiene promoters can gain a lot from cross-fertilisation in periodic review meetings, workshops and e-conferences. The mix of skills to be developed is comprehensive: community organisation; management; hygiene and health; participatory planning; monitoring and evaluation methods and tools; basic hygiene technology; and sensitivity and skills for achieving gender and social equity. As hygiene promotion catches on, there are more and more resource centres able to help with the skills development

process. Check TOP Contacts for contacts near you, or consult the Streams of Knowledge Coalition (SoK) for help in tracking one down.

Financial resources extend beyond the costs of salaries, training and transport. Also important is some seed money for pooling with local resources to finance small community-designed projects. In contrast, costs of educational materials are low. Community groups and workers rely on group work and home visits. Any material used for participatory activities (such as for PRA sessions and self-surveys) is locally available and has low or no costs. Other important items are resources for programme management and support (backstopping) to communities and for building up a programme knowledge base to summarise the situations and achievements in individual communities over time.

Financial support for hygiene promotion is sometimes difficult to get. The problem is not so much the amount of money needed as the extended timescale and the results and impacts obtained with the funds. Demonstration of what is being achieved with the funds can help make hygiene promotion more attractive.

Outputs: measuring behaviour change

Although water and sanitation professionals are generally sensitive to the need for patience in assessing the benefits of hygiene promotion, their agency rules may sometimes demand early results from impact analyses. However, it makes no sense to try and measure impacts. Even if reliable health statistics are available, impacts will only begin to show up after a critical mass of behaviour change has been achieved. Esrey, cited above, showed that 75% adoption of key hygiene conditions and practices has worked as such a critical mass for diarrhoeal diseases. Work is therefore done on monitoring techniques that measure impacts on hygiene behaviour prior to attempts to detect impacts on health. The book Actions Speak documents initial work done in this area.
http://www.irc.nl/page/1836

Before impacts can be assessed at all, information on outputs is needed. Outputs are a number of operationally described improved conditions and/or practices as defined from the identification of risky conditions and practices. (Some also call these effects).

There are a number of methods to measure effects in conditions and behaviour (behavioural change). The methods are often used in combination to test for consistency to see whether outcomes are reliable. The most common ones are:

- Structured observation of hygiene conditions and practices, e.g. observing whether facilities for the behaviour are in place and observing and recording behaviour e.g. during water collection, storage and drawing;
- Structured observation of proxies of hygiene behaviour, e.g. the absence of excreta in yards and on rubbish heaps as an indication of the safe disposal of young children's excreta, or well-trodden paths and excreta in pits as indicators of latrine use;
- Questioning of the ones who are most likely to know, which requires techniques to deal with interventions from others with less knowledge, who may nevertheless take

over for reasons of hierarchy, e.g. husbands or mothers in law. Probing techniques are often needed to move from polite answers to the real practices;

- Using participatory tools, such as pocket voting or mapping. In pocket voting women and men in the different groups are presented with drawings that show the various options and put their vote in the bag or box underneath their own, or their family's practices. Voting is done with a token in different colours in order to allow disaggregated analysis when all votes have been cast. The voting can be done at some distance or behind a cloth for privacy. In social maps, neighbourhood members indicate who have certain hygiene features, and statistics can be drawn from these, also by socio-economic group;
- Microbiology, e.g. tests of stored drinking water to assess contamination during transport, storage and drawing;
- Product measurement, e.g. sales of latrine slabs, soap consumption.

When hygiene promotion campaigns are focused, short, intensive and time bound, they will often need follow up. Very little is known about the longer-term effects of hygiene promotion. A project, financed by the European Union, to assess to what extent earlier achieved hygiene improvements are sustained has been carried out in six countries and its results show that single interventions are not enough.

Researching behaviour

Researching behaviour must be done well to get valid information and be worth the investment. A common error, for example, is to use the term 'hygienic' or 'clean' to denote a good practice. Such terms are open to interpretation: what is quite hygienic to observer A may be less so to observer B. Good or bad hygiene should therefore always be defined precisely and in such a way that everyone measures in an identical manner, e.g. smears of excreta in the pan/on the walls/on the floor/ on the cover. In one study that had failed to do so, the investigators found that the situation had actually worsened after the programme. This outcome came, however, not because the hygiene had deteriorated, but because the observers themselves had become educated and so more critical: what they had scored quite good in the pre-study they had scored as bad in the post-study! A distinction must further be made between unhygienic in terms of health risks and unhygienic in terms of aesthetics. This avoids situations where the presence of mud on the floor of the latrine during the rainy season, or organic litter in the streets during the harvest season, may be classified as unhygienic practices.

It is further important to establish whether such behaviour is sustained over time. Findings from recent research on sustained behaviour are reported at http://www.lboro.ac.uk/well/resources/%23%23fact-sheets/fact-sheets-pdf/shb.pdf

Behavioural change measurement can help to give earlier indication of cost-effectiveness, but there remains a need to educate non-sector personnel in donor agencies and national governments about the timescale needed for health benefits to be demonstrated. Case studies such as the one in Dosso, Niger (see chapter 6), are helping to show that hygiene promotion is cost-effective. As most of the materials used for community-based work are

locally available at little or no cost, financial needs mainly consist of salaries, training and transport, plus seed money to finance pilot or demonstration projects developed through the participatory process.

Duration

Changing hygiene will take time, no matter which approach is used. Community managed hygiene promotion programmes are by definition long-term. Communities can often only undertake one or two improvements at a time and progress is gradual, although the Community Health Clubs programme was able to show measurable change on 16 indicators (Waterkeyn, 2003). Higher time demand happens especially in communities where cohesion and leadership have to develop. They must know and have sufficient guarantee that co-operation will continue. With a prolonged and gradual programme, it is possible to measurably reduce many risky conditions and practices and to sustain the improvements. At the same time, more general outcomes may be achieved. Local capabilities for general development and solidarity may be built and local antitheses between genders and local groups reduced. Planning such programmes means low-level, long-term inputs over a prolonged implementation period. Not all policy makers, donors and programme agencies are ready to do so.

5. Case studies

On the following pages case studies are arranged by Regions (Africa, Asia, Latin America) and within those regions by country. They have also been keyworded according to the topics covered. Check the topic list below for links to the study on your topics of interest.

Advocacy	Zimbabwe 3
Baseline study	Palestine 1
Demonstration projects	Zimbabwe 2, 3
Handwashing promotion	Guatemala 1
Health Clubs	Zimbabwe 1,2
Hygiene game	Ghana 1
Hygiene Improvement framework (HIF)	Palestine 1; Nicaragua 1
Impact of hygiene promotion	Niger 1; Zimbabwe 1; Zimbabwe 2 Palestine 1
Indicators	Zimbabwe 2
Institutional support	Zimbabwe 2, 3
Integrated projects	Ghana 1; Zimbabwe 3; India 1
KABP study	Ghana 1; Zimbabwe 1, 2
Locally developed approaches	Ghana 1, Zimbabwe 1,2
Messages and media	Ghana 1;Zimbabwe 1; Guatemala 1
PHAST	India 1; Zimbabwe 2
Social marketing	Guatemala 1; Nicaragua 1
Training of hygiene promoters	Ghana 1; India 1; Nicaragua 1, Zimbabwe 2

5.1 Case studies: Africa

Ghana 1: Integrating health and hygiene into a water and sanitation project
Topics: Integrated projects; KABP study; locally developed approaches; hygiene game; messages and media; training of hygiene promoters.

This is a field example from the Northern Water and Sanitation Project (NORWASP) in Northern Ghana. Central to this project is the integration of health and hygiene into water supply and sanitation for rural communities. The majority of these communities have no existing protected water supplies and all are without adequate means of sanitation. ‘Free range’, or open defecation is the sanitation practice throughout. The project conducted a KABP baseline, which entailed a number of tools - many participatory, drawing from the PLA approach combined with observation and a brief questionnaire. A gender lens was incorporated throughout, although (in retrospect) more specific inclusion of children could have been made. Information from this baseline was used to:

- identify key risk and safe practices,
- identify challenges / barriers to engaging in safe practices,
- identify the interest in and willingness to pay for facilities,

- develop an appropriate community-based hygiene education programme, and
- develop a monitoring framework for tracking changes in behaviour / practices.

The participatory nature of the baseline research also complemented the project's community participation component, which includes animation, community mobilisation, training in O&M, and the training of community volunteers in hygiene education.

The community-based hygiene education programme was piloted first. This resulted in some important changes to the programme based on community feedback, such as changes to illustrations of practices, which would capture local and ethnic specific situations. A local artist was contracted to assist in the design of educational materials. The programme draws from participatory approaches such as PHAST and other PLA methods, including the development and utilisation of a health & hygiene game. The game is adapted from a common local game and developed by the same artist. Efforts were made to keep the programme appropriate both to participants' needs (time, seasonality, resources, etc.) and to fit within the project's own needs and challenges, such as accountability to both project participants and donors, availability of resources, etc. The project has high hopes for the use of and education from the game. The game proved to very popular during the pilot and can be used by a variety of people and groups within communities.

The education programme also focuses on facilitating discussion and exploration of the linkages between certain existing practices (positive or negative) and the impact (effect) on livelihoods as a whole. Cause and effect analysis of community identified risk practices is a valuable tool for education.

Training of field staff within Partner Organisations contracted to carry out community training is presently underway. These POs are responsible for facilitating part of the education programme with communities that entails initial in-depth analysis, prioritisation, action planning and monitoring. The POs will also train community water and sanitation committees (including hygiene volunteers) to continue education efforts, follow-up and monitoring. A major focus of the programme is that community volunteers will be equipped with the necessary skills / resources to continue community-based education.

The project is also exploring opportunities to team up with the MoH in delivering hygiene messages on market days to reach more women and in different local dialects. Information from the baseline indicated that language was a barrier to receiving information from the radio, especially for women, coupled with the fact that many women do not have the time to listen to the radio programmes. Radio programmes and messages are also being explored for encouraging traditional entertainment groups to create songs relating to different messages, as are elementary school art competitions (pictures of safe practices). Schools who take part could be provided with the resources for establishing simple handwashing facilities (for example).

The Project recognises the importance of identifying and training a good cadre of committed field workers for community mobilisation and education, and the dedication of field staff in programme delivery and follow-up with communities. This is both critical for achieving effective programmes and challenging when organisations that field staff come from are often faced with various resource constraints, seasonality issues, etc. A sound monitoring system that captures both community level change indicators and office level performance (or process) indicators should assist in identifying ways to enhance field staff effectiveness.

Another challenge is the timing of the provision of protected water systems and latrines while promoting on-going hygiene education. For example, delays in drilling when a community has already expressed interest in and even provided funding for a water system can negatively affect motivational levels for behaviour change. The NORWASP community-based hygiene education programme promotes healthy hygiene practices at 2 stages - before the water and latrine facilities are in place and after. Even if people recognise the need for and want a household latrine, for example, there is still the time in-between desiring the facility and actually having and using the facility. Discussion and education around the benefits and options for safer hygiene practices at the pre-facility stage is crucial. For example, burying and covering faeces away from the water source during wet and dry seasons, safe disposal of infant faeces, handwashing after defecation and handling of faeces. Some of the practices will remain the same when a facility is in place and being used regularly (such as handwashing). It is also critical to focus on a few key messages. Handwashing at critical times has been identified as a critical practice for the reduction of diarrhoeal diseases in under 5s, but handwashing at every critical time could mean up to 20 times a day to a woman who has a fully tasked day and little water available - especially during the dry season! Promoting handwashing at one or two critical times may be more appropriate and still be effective in reducing the incidence of illness. Careful monitoring of practices and the overall programme will tell.

The project is quite complex with its many levels of stakeholders, from its partnering government agency, smaller ‘meso’ level partnering organisations down to the community level of project participants and beneficiaries. This enhances both challenges to the project in terms of appropriate stakeholder involvement to the successes of working at various levels, combining experience and ideas for a shared cause and actually meeting milestones or achieving project targets in a timely fashion.
This Case Study was an Email contribution to the E-Conference on the Hygiene Improvement Framework by Jane Iredale Health & Hygiene Advisor NORWASP. Email: janeired@autobahn.mb.ca

Niger 1: Comparing two different promotion strategies
Topics: Impact of hygiene promotion

In the hygiene and sanitation programme of the rural water supply project in the department of Dosso, Niger, outputs of the regular promotion programme were compared with those of a pilot project in community managed sanitation and hygiene. The first group

consisted of 45 villages. The second group had five communities, chosen for a combination of expressed interest and staff assessment of their capabilities.

The main inputs for the pilot were help in organising community teams of women and men and training in using participatory planning and monitoring tools. The chosen (output) indicator was the average number of latrines built during one campaign period (one year). As its strategy, the programme gave inputs for sanitation until 50% of the households had built a latrine. The inputs included promoting sanitation (or, in the pilots, helping communities organise their own planning, promotion and monitoring), the training and equipment of one latrine mason per village, the provision of half a bag of cement and reinforcement bars for each sanplat, and follow up on maintenance and use.

In one year, and with an equal number of visits, the pilot group made the best progress. Here, an average 51 out of 180 households per community had installed a latrine, a progress of 28% (the end target was 50%). In the others, an average of 6 households out of 43 had done so, a progress of 15%. As there was no separate administration of costs for the two approaches, no evaluation on cost-efficiency (in terms of cost per latrine produced) or cost-effectiveness (e.g. cost per used latrine) could be made. Nevertheless, the programme decided that any community seeking to evaluate self-managed programmes would be enabled to do so.

Email:sybesma@irc.nl

Zimbabwe 1: A "health club" approach to hygiene promotion
Topics: Health Clubs; Integrated projects; Impact study; Messages and media

A district in south-eastern Zimbabwe called Bikita (population of around 200,000) has for the past seven years been implementing an integrated rural water supply and sanitation project as part of the Zimbabwe National IRWSS Programme, funded by DFID. At the heart of the programme are the "Health Clubs", which increase health awareness and knowledge of villagers in a structured and friendly atmosphere.

The Health Club approach was first used by the NGO ZimAhead, in three wards of Rusape District in eastern Zimbabwe. The obvious popularity amongst villagers witnessed during a field trip to Rusape by Bikita staff, lead to it being adopted as the chief health and hygiene training methodology for Bikita.

The Health Clubs are free to join, and offer a structured course of 16 health and hygiene related topics, as well as a number of home improvement tasks. The syllabus is taught by MOH ward level Environmental Health Technicians (EHTs), nurses and specially trained village community workers (VCWs) using participatory tools. It has proved very popular since it was first introduced to villages in Bikita in 1997.

Both men and women have turned up regularly to their weekly meetings to learn and share experiences. Interestingly the original 16 week time frame to cover the 16 topics have in

almost all cases been exceeded, as more people have come to join and club members often want to repeat lessons. This has necessitated the training of VCWs to keep the old clubs active, whilst the EHTs go on to open new clubs. To date most of Bikita District has been covered, with at least one health club opened in each VIDCO or village development committee area.

Shock tactics to get messages across have also proved popular. Just as with commercial advertising, things that make people shocked and grab their attention are more likely to stay in the mind and make people think. One of the slogans being used in Bikita reads “Musagovana Madhoti” or “don't share your shit”. Aimed at informing the public of the dangers of not handwashing after using the toilet, it is often chanted at health club meetings. Bikita cannot however claim the rights to the saying, as it was used by Steven Esrey during a presentation that he made to a conference on sanitation in Zimbabwe in 1999, and then got taken back to the field. "Genzai maoko nekasipo mabva muchimbuzi" or “wash your hands with a small piece of soap after you visit the toilet” is another message that also appears on project T-shirts.

The Health Club approach has been appreciated by all involved. It has made a difference to people’s lives and it has made the job of the health staff more interesting and fulfilling, helping them to enjoy and do their work more effectively, as they see how well their work is received. It has also almost certainly already saved lives.

A cholera epidemic in the district in 1999 only affected villages that at that time had not been covered by the health club hygiene education.

A KABP (Knowledge Attitudes Behaviour and Practices) study undertaken in 1999 showed definite increases in health and hygiene awareness and safe practices in areas with health clubs (Mathew & Mukuwe, “Health clubs - hygiene education in Bikita IRWSSP”, 25th WEDC Conference proceedings Addis Ababa Ethiopia 1999 pp 98 -101. This paper is available at http://www.lboro.ac.uk/wedc/papers/25/098.pdf

To sum up, of particular importance are:

- The structured nature of the health and hygiene education on offer, with repeated lessons and tasks bringing home the message and giving clear vision of the problem and the solution, far more successfully for example than “one-off sessions” held for mothers visiting clinics.
- The enthusiasm the methodology brings, both for communities and staff, generating ownership of the process.
- The commitment of both communities and staff to see an improvement in their areas once they understand the need and have ownership of the means to make a difference.

Zimbabwe 2: Cost-effectiveness of the "health club" approach

The cost-effectiveness of the health club approach was evaluated in Makoni district, one of the three districts where the programme started in 1994.The aims were to set up at least 100 health clubs (5 in each of the 20 wards), each with at least 50 members and achieve the construction of 2,000 Ventilated Improved Pit latrines in two years (with three bags of cement for a subsidy), and through participatory methods promote the adoption of upto 50 better hygiene practices on household hygiene (21), personal hygiene (14), environmental hygiene (6) and prevention of malaria (9).

Six years later, and two years after the programme had gone to scale from 3 via 7 to 20 wards, the aims were more than achieved. There were 141 active clubs, with over 10,000 members and on average they had held seven sessions per month over a period of eight months. In each session, one topic was tackled in principle, although there was quite a demand for coming back to previous topics. Members had constructed over 3,000 latrines.

The direct costs of the programme are the training of Environmental Health Technicians (14) in participatory methods, the provision of education material, and equipment (motorbikes). The average health education costs over two years, including start up costs of training and equipment of EHTs, were almost 4 US$ per clubmember. If also the other members of the households are seen as beneficiaries, the average costs drop to 63 dollar cent per person.

Additional costs not included are the recurrent transport costs (1200 kms/month), the cement (US$ 15 per latrine), salaries of the EHTs and of approximately 100 Village Community Workers, administration costs (some 10%) and time of volunteers.

Between August 2000 and August 2001, a survey was carried out on application of improved hygiene practices in a random sample of 25 clubs (15 respondents/ club) and a control group of 100 respondents from similar communities adjacent to the project areas. The survey covered observations on 12 (another paper says 13) hygiene conditions/practices. Of these, four or five (swept yard, use (and presence?) of soap, clean latrine, covered storage of drinking water vessels and presence of drying frames for utensils) have a long history of promotion by the Ministry of Health. Additional practices promoted by the clubs are safe sanitation (either by having a proper latrine or reported practice of covering excreta), water drawing laddles, refuse pits, individual cups and plates, facility for handwashing, or pouring water from a container over hands instead of all washing in the same basin, and presence of a vegetable garden.

Positive indicators of good hygiene were all higher in the health club group than in the control group. Average difference was 17%. Differences varied from 40% in the methods of washing hands to only 6% in the use of soap for hand-washing, due to economic constraints. The differences were smaller for conditions and practices long promoted by the Ministry of Health. On hygiene knowledge, nine topics were covered: knowledge (on transmission and prevention?) of different diseases (diarrhoea, malaria, bilharzia, worms,

skin diseases, HIV/AIDS and tuberculosis), oral rehydration therapy, and better practices of child care (no specification given). Here, average difference was 8%, but rose to 35% for the project-specific topic of child-care.

Zimbabwe has a long tradition of Environmental Health Technicians. The papers show that effective sanitation and hygiene promotion by technicians trained on community organization and hygiene promotion techniques can be quite cost- effective. More information on how the data were actually collected (observations and/or questions, with or without probing?) would however have been welcome. Some of the findings, such as presence of latrines - are based on observations. For others, such as practicing 'cat's sanitation' and use of soap it is not clear if these have also been observations (absence of signs of open defecation and presence of soap in house at time of survey) or reported practices only.

Having a reported practice confirmed by observations would in principle make the data more reliable, as it is quite possible that with good knowledge answers on practices are 'socially desirable'. A spot observation can then give triangulation, although of course a piece of soap may be reserved for washing clothes and not hands, especially in economic hardship times. Probing can then be a good way to find out if data are valid (that is, actually measure what they are supposed to measure: soap used for washing hands). It would also have been useful to know who in the families are reportedly using the latrines and how cleanliness of latrines was assessed. In the latter case, individual interpretations of what is a 'clean latrine' may differ between the surveyors. A clean latrine can be defined as a latrine without disease transmission risks (e.g. no excreta visible on floor, walls and - in where applicable – latrine pans; holes covered against flies or waterseals intact); dust or mud will not constitute a transmission risk.

Sources: Waterkeyn, Juliet, Cost-effective Hygiene Promotion: Community Health Clubs, Harare, Zimbabwe: AHEAD (unpublished paper), http://wedc.lboro.ac.uk/conferences/pdfs/29/Waterkeyn.pdf; http://www.africaahead.com/cost_eff.html

Zimbabwe 3: Integrating Hygiene with WSS at national level
Topics: Integrated programming; Institutional support; demonstration projects; advocacy; indicators and impact studies; PHAST

In Zimbabwe, integration of water, hygiene and sanitation has taken place not at project level but at programme level, in the Integrated Rural Water Supply and Sanitation Programme (IRWSSP). This programme initially focused on hardware but after the piloting and use of participatory methods, hygiene is now given a priority and hardware components are viewed as hygiene-enabling facilities.

The aims of the programme were to give everyone access to improved water supply within 500 yards of their homes and improved sanitation, at least of the level of Ventilated Improved Pit (VIP) latrines.

The programme has not been able to realise its very ambitious goals, but good progress on sanitation and hygiene has nevertheless been achieved. According to the data of the programme, sanitation coverage increased from 15% in 1985 to 32% in 1998 through the construction of about 500,000 VIP latrines. Under the central programme, some 5,000 latrines were installed per year. When the programme was decentralized to the districts, this dropped to 10,000, but later on picked up to 20,000. This is still below the 30,000 per year needed to cover the 3% population growth. Moreover, the actual installation data are not well-known, and families may have opted for constructing simple pit latrines if they could not get the 3 bags of cement (the incentive for a VIP latrine) from the districts.

The partial success of the programme can be attributed to among others:

- Institutional arrangements (UNICEF/IRISH aid have supported training and production of materials). The government has also allowed different organisations to pilot and apply different approaches e.g. Health Clubs. The programme approach is that of integrating water, hygiene and sanitation through an intersectoral committee.
- Methodologies used - these have allowed for communities to identify their real problems and not perceived problems. They have also facilitated understanding of cause and effects leading to desire to change. The development of methodologies was supported by actual promotion instruments - the toolkits- and this has enabled extension workers to promote hygiene.
- Rather than starting with policy, the ministry started by piloting the use of participatory methods and then demonstrating to policy makers that it works. In this way the ministry got endorsement.

For more details, contact: Max Jonga, UNICEF, Harare; Mr. W. Rukasha, Ministry of Health and Child Welfare.

Among the lessons drawn from the Zimbabwe experience, the project staff emphasize:

- Many issues or factors have to be put in place to facilitate hygiene behaviour change. The format and combination of these factors is very much dependent on the local situation and cannot be externally prescribed. This is seen as one of the main reasons for the success of the participatory PHE/PHAST in Zimbabwe.
- Hygiene education should be undertaken both before and after the provision of hardware interventions such as water and latrines. Water and sanitation facilities are by their very nature hygiene-enabling facilities, but the absence of a pump or a latrine does not imply that hygiene behaviour cannot be improved and we shouldn't limit ourselves to the scope of the intervention. In fact in many communities where there are no hygiene enabling facilities the need for improved hygiene behaviours is far greater and the impact of improved hygiene awareness among communities often results in the provision of enabling facilities through local innovations. Hygiene education is not just a once off message exchange, but rather an overall process, which will culminate in improved health.
- To obtain the right policy environment and institutionalisation of hygiene education, advocacy is essential at all levels right from the community level to Ministerial level. Government departments, local Councils, NGOs and CBOs must have an

understanding of the importance of improved hygiene behaviours and not just see it as an add-on to water and sanitation. Such advocacy can take a number of formats, but in Zimbabwe probably the most successful advocacy tool was demonstration - both of the processes and the impact. National level policy makers were exposed to the methods and tools and not just informed about them; and training institutions were included in the training. Over time this resulted in PHE being seen as an integral part of the Integrated water and sanitation Programme, it was a tangible aspect which could be planned for and measured and projects would not be approved without such a component. National training institutions included it in their curricula and it became an examinable subject. However most importantly communities and community groups started to demand more hygiene education, they felt that the processes used allowed them to participate and use their own knowledge and experiences to improve their own health.

- Impact monitoring is not always easy and staff can get very bogged down in the development and measurement of indicators. “At one stage we had so many indicators the implementers would have had a full time job just monitoring impact!” (Therese Dooley) The reality is that monitoring is a very simple process and the tools and techniques themselves are actually very good monitoring tools. The changes in knowledge and attitudes can be seen when using the tools and behaviour change is reflected within the communities. Communities themselves can monitor the changes and will tell you the impacts. In Zimbabwe in addition to the changes in attitudes of the project implementers, the greatest impact the project has had to date was the changes in hand-washing practices throughout the country. Handwashing was widely practised in Zimbabwe before the project ever commenced, but this was predominantly communal handwashing (that is, all in the same bowl) and through project interventions this changed to pour and wash methods. What may seem on the surface to be a simple change in behaviour was in fact very difficult to achieve as the project sought to change an ingrained cultural practice. There were many other impacts in various parts of the country, some of which could be directly attributable to PHE and others which combined PHE with other interventions and these include scabies and schistosomiasis reduction.
- Care should be taken not to try and cover too many issues at once -focus on what's important to the community.

This Case Study was a contribution to the HIF E-conference, by Noma Nyoni, IWSD (e-mail noma@iwsd.co.zw) It was amplified in a further contribution by Therese Dooley (tdooley@eircom.net).

Additional information from http://www.wsp.org/publications/af_zimbabwe.pdf

5.2 Case studies: Asia

India 1: A decade of hygiene education in Kerala
Topics: Integrated projects; training; PHAST

The first integrated rural water supply and environmental sanitation project in Kerala, India, supported by DGIS and Danida, introduced a hygiene education component in both water and sanitation activities more than a decade ago. The first and foremost thing is to identify and train good cadres of committed social workers for community mobilisation and education (including hygiene). The main goal is that the workers should be able to select the right type of approach or combination of approaches for each situation and use them effectively. They use very simple methodologies for communication. They avoid sophistication and high-profile jargon from the sector. This involves more than simply explaining the importance of hygiene education to the people. Adequate thrust has to be given to studying and understanding how beliefs and attitudes influence behaviour (especially hygiene practices) and thus affect disease transmission. Based on the outcome of the local assessment, the project designed a (one time) radio programme on hygiene education in water supply and environmental sanitation for a period of six months.

Schools were used as focal points for popularising the water and sanitation programme. This includes the value of water, water management, handling of water, hazards of open-air defecation, use and maintenance of WATSAN facilities etc. The case study contributor was involved in the PHAST methodology at the pre-testing stage. He commented that “it then became an academic exercise, and it was quite disappointing that not much focus was given to learning from others”. However, afterwards other participatory learning methods for school sanitation and hygiene education were developed and are now published in a forthcoming manual: The Joy of Learning

Email: bkurup@md3.vsnl.net.in
For details, see K. Balachandra Kurup et al, The community managed sanitation programme in Kerala: Learning from experience, IRC Project and Programme Papers, 4-E, 1996). http://www.irc.nl/page/1869

The Joy of Learning is available at http://www.irc.nl/page/167

Palestine : The Hygiene Improvement Framework in 45 villages
Topics: HIF; baseline study; impact analysis

The EHP and Save the Children have implemented the USAID-funded Village Water Systems (VWS) Project in 45 villages in the West Bank in West Hebron and South Nablus. Villages range in size, but most are under 5,000 in population. VWS consists of three primary components, all of which track very closely with the Hygiene Improvement Framework. The largest component is the engineering design (access to hardware) of the water supply systems. All the water supply systems are piped. The second component is the establishment of three joint services councils (enabling environment). Joint services

councils (JSCs) are associations of villages that are created to provide a public service such as water supply or solid waste. They are legally independent and are registered in the Ministry of Local Government.

Each JSC manages the water distribution systems in its service area and carry out all the basic functions of a water utility. The third component is the environmental health component (hygiene promotion). To design this component an environmental health conditions and practices study was carried out with 300 heads of household and 300 children. Also stool samples from 300 children 12–47 months were analysed , and two water samples from 100 households (point of entry and point of use). Together with the London School for Hygiene and Tropical Medicine, and the Water Supply and Sanitation Collaborative Council (WSSCC) EHP developed guidelines and model questionnaire. These were used not only in Palestine, but also in DR Congo, India, Madagascar, Nicaragua, and Peru.

The intervention focused on on infrastructure and management of water supply and sanitation services. Since EHP was responsible for all three components, it has been able to integrate them and identify important synergies. For example, in addition to health and hygiene information, the household survey collected information on water consumption, wastewater disposal practices, household income, and how much people currently are paying for water and wastewater disposal. The information was of benefit in determining the ability and willingness to pay for services.

The project implemented a series of small projects on handwashing, home management of diarrhea in children-under-5, and improved household level-water storage and disinfection practices. Due to the prevailing political situations, the focus was on simple, community-based interventions that could potentially lead to a reduction of child diarrhoea and intestinal parasites. Partnerships between relevant ministries and government agencies, and in particular the Ministry of Health, were formed and serve as the basis for supporting Integrated Management of Childhood Illness (IMCI) in the country. The impact on practices and conditions, has as far as could be established, not yet been researched.

http://www.dec.org/pdf_docs/PDACA584.pdf
http://www.phishare.org/files/887_JP5WestBankAssessfinal.pdf

Email: Fred Rosensweig, EHP.

5.3 Case studies: Latin America

Guatemala 1: Social marketing for handwashing
Topics: Social marketing; handwashing promotion; messages and media

A handwashing promotion programme in Guatemala found that parents saw clean children as more attractive and happier. Handwashing was considered good, but enabling factors were lacking. Soap, water and towels were scattered. Handwashing placed demands on

mothers' scarce time and energy and the family's resources. Mothers were interested in hygiene education. They wanted short sessions and information materials in their own language and Spanish. Approval from fathers was crucial because they objected to higher water bills. The project introduced a 'happy corner' for handwashing in the home and spread information to mothers on proper ways of washing hands. Fathers and children had their own messages to reinforce the desired behaviours (Booth & Hurtado, 1992).

In a second campaign, a catalyst (in this case a bilateral project) brought together the governments (which wanted to reduce diarrhoeas) with the private sector (the soap companies) in five countries. The campaign promoted proper practices (1: washing both hands 2: with soap 3: rubbing at least three times 4: dry with a clean towel) at critical times (1: before food preparation 2: before eating 3: after toilet use 4: after cleaning babies' bottoms). Targeted were mothers in rural areas with low levels of education and socio-economic status having children under five and primary schoolchildren from these families.

Radio and television spots were the main media. In the evaluation, one in every three people could recall the campaign. This was less for rural and indigenous groups. In the before-after study in Guatemala, with an estimated outreach to 1.5 million children alone, the ability to mention all critical times and demonstrate the four proper practices increased by 10%, especially in urban areas. Again, a 'dedicated place' for handwashing supported good practice. Changes in the other countries were more modest.

Saadé, Camille, Bateman, Massee, Bendahmane, Diane B. (2001). The story of a successful public-private partnership in Central America: Handwashing for diarrheal disease prevention. Arlington, BASICS, EHP, UNICEF, USAID and World Bank. http://www.basics.org/publications/pubs/Handwashing/handwashing%20frontmatter.PDF

Nicaragua 1: Use of the Hygiene Improvement Framework in disaster relief
Topics: HIF; Social marketing; training

After Hurricane Mitch, EHP managed rehabilitation work in Nicaragua, focusing on water supply, sanitation and environmental health. This was a two-year project and ended in December 2001. This project used the HIF conceptual framework as a basis for managing the reconstruction (and in some cases new construction) of systems damaged by Hurricane Mitch; the principal components were:

- Access to hardware: construction of 2,692 water supply schemes; 7,226 household latrines and 3,503 environmental projects (drainage, solid waste management etc.). These projects were executed by seven NGOs and based on the concept of community participation and management.
- Hygiene promotion: hygiene education and the promotion of positive behaviour changes were incorporated as integral aspects of all activities at project level. Promotion and mobilisation was done through two principal mechanisms:
    - by the training and equipping of dedicated community members (as part of the water committee) and

- through a schools programme, with formalised links with the ministry of education.

The EHP office in Managua facilitated the process of identifying critical behaviours, key messages and the standardisation of basic components for the various NGO hygiene promotion work-plans. In addition, the EHP programme was involved with a nation-wide social marketing strategy, which promoted common messages and themes around safe handling of water in the household, safe use of latrines and personal hygiene. These were delivered through radio, print media and through a travelling bus, which visited rural areas where projects were being implemented.

- Enabling environment: the programme focused on a number of key aspects of the enabling environment, both at project or community level (through strengthening water committees, training and community organisation etc.) and at national level (by disseminating sector policy to the NGOs, capacity-building of the NGO implementing partners, promotion of best-practices etc.). In this case, as EHP was managing the overall programme, the application of the HIF framework as a conceptual "tool" was definitely a conscious decision. It was a useful mechanism for management purposes and for providing continuity across a large and rapidly implemented programme. Some of the NGOs found it particularly useful for ordering their own thinking and approaches, especially those that had more limited previous experience. This programme experience is documented in the final report, which is available at the EHP website http://www.ehproject.org/ under the publications section - Activity Report 06.

This case study is based on a contribution to the HIF E-conference by:
Harold Lockwood MSc,
CIWEM
Telefax: ++44 (0)1206.823329
Mobile Tel: ++44 (0)7947.515985
E-mail: AguaConsult@hotmail.com

TOP Books, manuals, articles and papers

The titles below contain a short description. You can find a list of titles mentioned in the TOP without a description in TOP References.

Almedom, Astier M. , Ursula Blumenthal and Lenore Manderson (1997). *Hygiene Evaluation Procedures: Approaches and Methods for Assessing Water- and Sanitation-related Hygiene Practices.* London, UK: London School of Hygiene and Tropical Medicine; Brisbane, Australia: Australian Centre for International and Tropical Health and Nutrition, University of Queensland Medical School, and International Nutrition Foundation for Developing Countries (INFDC).
http://www.unu.edu/unupress/food2/UIN11E/uin11e00.htm#Contents
Handbook containing practical guidelines for evaluating water- and sanitation-related hygiene practices. Holds a list of publications relevant to hygiene promotion and behavioural change including on data collection and analysis.

Bradford, B. and R. Suarez (1993). *The economic impact of the cholera epidemic in Peru : an application of the cost of illness methodology*. (Wash field report; no. 415). Arlington, VA, USA, Water and Sanitation for Health Project (WASH).http://pdf.dec.org/pdf_docs/PNABP618.pdf

Bunde-Birouste, Anne W. (2002). *Health promotion effectiveness: an analysis of work at the XVIIth World Conference on Health Promotion and Health Education.*
Abstracts of 70 presentations on the effectiveness of health promotion for adults and school age children and the use of this evidence with policy and decisions-makers. Notable is the underrepresentation of studies from developing countries and lack of attention to water supply, sanitation and hygiene. The interest lies in the attention to methods of measuring effectiveness and controlling the quality of health education programmes. The document itself is no longer on the web, but information can be obtained from cjones@iuhpe.org

Cairncross, Sandy and Valerie Curtis (2002). *Hygiene and Sanitation Promotion.* London: London School of Hygiene and Tropical Medicine and Geneva: Water Supply and Sanitation Collaborative Council
http://www.wsscc.org/load.cfm?edit_id=150
Briefing paper. Gives the reasons for hygiene promotion and answers main questions for programming.

Cristoffers, Trea and Christine van Wijk (2004). *The Value of Hygiene Promotion: Cost-effectiveness analysis of hygiene promotion interventions.* Delft, The Netherlands, IRC. Summary will be available in http://www.lboro.ac.uk/well/resources/%23%23fact-sheets/
Literature review on how costs and effectiveness of hygiene promotion programmes are measured using Disability-Adjusted Life Years (DALY) and behavioural change. Inputs,

outputs and outcomes are focused more on than effective processes. Comes with cases in Burkina Faaso, Guatemala, Niger and Zimbabwe.

Curtis, Valerie, Sandy Cairncross and Raymond Yonli (2000). 'Domestic hygiene and diarrhoea: pinpointing the problem.' Tropical Medicine and International Health, volume 5 no 1 pp 22–32 january 2000
http://www.blackwell-synergy.com/links/doi/10.1046%2Fj.1365-3156.2000.00512.x
On cost-efficiency and effectiveness of targeting key risky practices in hygiene promotion interventions.

Curtis, Valerie, Bernadette Kanki, Simon Cousens, Ibrahim Diallo, Alphonse Kpozehouen, Morike Sangare´, & Michel Nikiema (2001). 'Evidence of behaviour change following a hygiene promotion programme in Burkina Faso.'
Bulletin of the World Health Organization, 2001, 79: 518–527.
http://www.who.int/bulletin/pdf/2001/issue6/vol.79.no.6.518-527.pdf
Surveys were used to determine if a 3-year programme had changed behaviours associated with the spread of diarrhoeal diseases. Programme characterics were: tailored to local customs, targeting specific practices, building on existing motivation for hygiene and using locally appropriate communication channels. After three years, three-quarters of the mothers targeted had had contact with programme activities and half could cite the two main messages correctly. Safe disposal of children's stools changed little (from 80% to 84%), but handwashing with soap after cleaning a child's bottom rose from 13% to 31%. The proportion of mothers who washed their hands with soap after using the latrine increased from 1% to 17%. Hygiene promotion programmes can thus change behaviour and are more likely to be effective if they are built on local research and use locally appropriate communication channels repeatedly and for an extended time.

Favin, M. ; Naimoli, G. ; Sherburne, L. (2004). *Improving health through behavior change : a process guide on hygiene promotion.* (Joint publication / EHP; no. 7). Washington D.C., USA, US Agency for International Development and Arlington, VA, USA, Environmental Health Project EHP).
http://www.ehproject.org/PDF/Joint_Publications/JP007-CIMCIProcessGuideWeb.pdf
A comprehensive guide to develop hygiene promotion programmes for behavioural change. The intended audience are researchers, planners and managers. Included are organization, preparation, and formative research in representative communities, followed by strategy formulation, planning, implementation and monitoring and evaluation. Community participation is through local CBOs and volunteers, but outsiders are in command. It would be possible to use visual participatory tools (e.g. social maps and self-assessment tools for measuring practices and monitoring change) in addition to or instead of focus group discussions and role palys, which are the major methods used to get at local perspectives.

Fawcett Ben and Deepa Joshi (2001). 'Water Projects and Women's Empowerment.' in Proceedings of the 27th WEDC Conference, People and Systems for Water, Sanitation and Health. Lusaka.
(http://www.eng4dev.soton.ac.uk/eng4devpdfs/R6575%20WEDC%20Paper.PDF)
Women in the Swajal project area in Uttar Pradeh, India, did a participatory 'healthy homes survey". For poor women, in poor housing conditions it was difficult to meet the project standars - apparently there had been no definition with poor women on 'their' home hygiene and achieving it with their means. Men's roles and responsibilities in home hygiene were totally overlooked. Full research published as Joshi, Deepa. The Rhetoric and Reality of Gender Issues in the Domestic Water Sector - A Case Study from India. PhD thesis submitted to the Faculty of Engineering and Applied Science, University of Southampton, UK. May 2002.

Gordon McGranahan, Simon Lewin, Taryn Fransen, Caroline Hunt, Marianne Kjellen, Jules Pretty, Carolyn Stephens, Ivar Virgin (1999).'Evironmental change and human health in countries of Africa, the Carribbean and the Pacific.'
Urban Health and Development Bulletin - Vol. 3, No. 1, March 2000. Stockholm Environment Institute
http://www.sei.se/newreport.html
After introducing the broad global, economic, political, social, institutional context, the report describes and compares the health status and key health threats in ACP countries. It reviews environmental developments and how they are influencing health. Locally appropriate environmental health priorities and measures are identified. Faecal-oral diseases and their reduction are included throughout the document as they are the most important contributor to the environmental burden of disease in ACP-African countries and in certain Pacific and Caribbean countries.

Hart, Roger A. (1997). *Children's participation : the theory and practice of involving young citizens in community development and environmental care.*
London, UK, Earthscan. - xi, 208 p. : 23 boxes, 83 fig. - Bibliography: p. 195-203. - Includes index ISBN 1853833223 Price: GBP 18.95 This book, commissioned by UNICEF, concentrates on the conceptual issues, processes and methods for involving children (up to 14 years of age) in research, planning, design, management and monitoring of the environment. The "environment" is interpreted broadly to include, for example, the planning of housing areas and the management of playgrounds. Detailed case studies are provided from urban and rural, poor and middle class communities from the North and South. Part one of the book contains an introduction and chapters on conceptual issues relating to children's capacity to participate, organisation principals, and new models for involving children and new institutional alliances. The organisations described range from community schools to children's organisations, clubs, local government and NGOs. Part two on children's participation in practice begins with action research followed by sections on environmental planning, management and monitoring, public awareness and political action, and networks. The final part of the book describes participatory methods for involving children, including drawings and collages; mapping and modelling; interviewing and surveys; and media and communication.

Harvey, Eric, Shadrack Dau, Alana Potter and Phumla Mei (2002). *Participatory Methodology Facilitation Guide.* Braamfontein, South Africa: Mvula Trust.
http://www.mvula.co.za/resources/reports/Guide_for_Participatory_Appraisal,_Monitoring_and_Evaluation.pdf
A guide with participatory tools on how to help communities identify and analyse problems, define baseline situations, and plan, monitor and evaluate solutions. Important other chapters are on faciltators' skills and organization of the assessment. Strengths of using participatory methodsinclude insight and commitment from analysing in groups the local situation with local knowledge and planning local change. Weaknesses include the effect that local power relations may have on the degree of participation and which problems and solutions come out.

Hutton, Guy (undated, c. 2002). *Considerations in evaluating the cost effectiveness of environmental health interventions.*
http://www.who.int/docstore/peh/burden/WSH00-10/WSH00-10TOC.html
An overview of recent studies on economic evaluations of environmental hygiene interventions and the various methods of research that can be applied. Emphasis is on going beyond conventional frameworks of environmental health economics and include all costs and benefits of all groups involved. Water, sanitation interventions are included, hygiene promotion programs as component of water or sanitation projects or as separate interventions are not, with the exception of one study in Zaire.

Neilsen, M.; A. Hoogvorst; F. Konradsen; M. Mudasser; and W. van der Hoek (2001). 'Childhood diarrhea and hygiene: Mothers' perceptions and practices in the Punjab, Pakistan.'
Working Paper 25. Colombo, Sri Lanka: International Water Management Institute.
http://www.cgiar.org/iwmi/pubs/working/WOR25.pdf
Researched are causes of childhood diarrhea for under fives and links with hygiene practices and drinking water and sanitation facilities as perceived by mothers in a random sample of 200 households in ten villages. The study found that despite the mother's central role as caretaker one should not operate on the traditional mother-child relationship but also include the husband-wife relationship, and target other individuals involved in setting norms within the household or within the nearby community.

Paramasivan, Shunmuga and Belinda Calaguas (undated ca. 2001). 'Meeting the Sanitation and Hygiene Challenge: Experience of WaterAid in India.'
London and Tamil Nadu, India: WaterAid
Report on raising and meeting demands for low cost rural sanitation in 15 districts in Tamil Nadu. Specific coverage is not clear due to a typing error, but seems to be 19,098 latrines in 1750 villages by 1999. Specific advocay helped spread information on approach and results to government officials and NGOs. Report available from Wateraid (no longer on internet). For a related document on creating latrine demand in Indonesia see
http://www.wsp.org/publications/eap_toilets.pdf

Rosensweig, Fred and Chris McGahey (2002). 'Hygiene Improvement Framework.' Summary Report E-Conference March 1-31, 2002. Arlington, VA, USA: Environmental Health Project
http://www.sanicon.net/titles/title.php3?titleno=61
Supplementing observations and provocative questions from an E-conference , with case reports of water and sanitation projects with hygiene promotion.

Sawyer, Ron M. Simpson-Hébert, S. Wood (1998). *PHAST Step-by-Step Guide: a participatory approach for the control of diarrhoeal disease.*
WHO, Switzerland, Geneva, (WHO/EOS/98.3)
http://www.who.int/docstore/water_sanitation_health/Environmental_sanit/PHAST/phast96-11/96-11index.htm
Includes instructions for helping communities improve hygiene behaviour, prevent cholera and other diarrhoeal diseases, and manage their own water and sanitation facilities. Addressed to facilitators working in the community, the manual uses the Participatory Hygiene and Sanitation Transformation, or PHAST, approach, an exciting new methodology, which relies on locally prepared visual "toolkits" to stimulate community enthusiasm and participation. Recommended materials and activities were extensively field tested in four African countries.

Shordt, Kathleen (2003). 'Sustaining Hygiene Behaviours.' Loughborough, UK: Loughborough University.
http://www.lboro.ac.uk/well/resources/%23%23fact-sheets/fact-sheets-pdf/shb.pdf
Factsheet produced for the WELL information programme. It gives findings from research in the literature and an EU-financed six-country study on whether hygiene behaviours such as handwashing and latrine use and upkeep continue after education finishes. Hygiene promotion was more essential than closeness and availability of water and behaviours lasted longer when promoted intensively over time with personal contacts. For 3 country studies see: www.newah.org.np/health%20education.htm (Nepal); http://www.netwas.org/newsletter/articles/2004/05/7 (Kenya) and http://www.irc.nl/page/4414 (Ghana).

UNDP-World Bank Water and Sanitation Programme (1998). 'Healthy communities.' English, 13 minutes/14 seconds. Price: US$ 20.00 A documentary about the Participatory Hygiene and Sanitation Transformation (PHAST) method, which has been pilot-tested in Botswana, Ethiopia, Kenya, Uganda, and Zimbabwe. Available from: Communications, UNDP-World Bank Water and Sanitation Programme, mailto:info@wsp.org. No longer available free from internet.

UNICEF (1999). 'Towards better programming: a manual on hygiene promotion.' (Water, Environment and Sanitation Technical Guidelines Series No. 6). New York: UNICEF (French and spanish versions pending) http://www.unicef.org/wes/files/hman.pdf

This manual presents methodologies to assist development workers in the promotion of behavioural change for safer hygiene practices, and to help make hygiene promotion

programmes more effective. The objective of the manual is to provide a tool that will contribute towards a reduction in diarrhoeal diseases – one of the top three killer diseases in developing countries – and thus a reduction in child mortality. The manual describes a methodology for bottom-up programming for hygiene promotion: first finding out what people know about hygiene through formative research in people's knowledge and practices, and then combining this with state-of-the-art expert knowledge and appropriate communication strategies to develop effective and sustainable programming models. The manual is accessible and jargon-free: its audience includes all professionals interested in the area of hygiene promotion.

Waterkeyn, Juliet (2003). 'Cost-effectiveness of Health Promotion: Community Health Clubs.' Paper presented at the 29th WEDC conference, Abuja, Nigeria. http://wedc.lboro.ac.uk/conferences/pdfs/29/Waterkeyn.pdf. In-depth study on costs and effectiveness of community health clubs for changing 50 hygiene practices. Report on 12 of 16 observed practices show clubmembers practice more hygiene than the control group. The original paper (see case study) has more details and gives 27% higher adoption on club promoted practices and 7% on practices already long promoted by the Ministry of Health. As the programme grew and If family members are included, cost per person dropped from USD 1 to 35 cents. It is not clear what has happened overall after project completion and under the economic crisis.

WHO (2005). 'The Role of Hygiene Education' (Factsheet 4.1). Geneva, Switzerland, World Health Organization.
http://www.who.int/water_sanitation_health/hygiene/emergencies/fs4_1.pdf
Hygiene education helps improve health with and without improved facilities. Good programmes make people aware, help prioritise and encourage self-action. Participation througout technology programmes is a condition, and has time and cooperation implications. The use of participatory learning methods is recommended.

WHO (2000). 'Global Water Supply and Sanitation Assessment Report.'
Geneva: World Health Organization
http://www.who.int/docstore/water_sanitation_health/Globassessment/GlobalTOC.html
Hygiene promotion is increasingly important as rapidly increasing epidemiological evidence points to the importance of relatively small behavioural changes in protecting families from faecal-oral disease.

WHO (1999). 'Statistical Annex World Health Report 1999.'
Geneva: World Health Organisation
(http://www.who.int/whr/1999/en/)

WHO (1996). 'Participatory Hygiene and Sanitation Transformation: A new approach to working with communities.'
WHO, Switzerland, Geneva (WHO/EOS/96.11)
http://www.who.int/docstore/water_sanitation_health/Environmental_sanit/PHAST/phast96-11/96-11index.htm

Describes an exciting new approach, based on an innovative set of participatory techniques, which has demonstrated its ability to promote hygienic behaviour, sanitation improvements, and community management of water and sanitation facilities. Known as the Participatory Hygiene and Sanitation Transformation, or PHAST, initiative, the approach was carefully developed and tested in both urban and rural areas of four African countries: Botswana, Kenya, Uganda, and Zimbabwe. Results of these tests indicate an unprecedented involvement of communities, the particular suitability of PHAST techniques to resource-poor settings, and remarkable success in terms of environmental and behavioural improvements.

Wijk, Christine van Wijk and Tineke Murre (1995). *Motivating better hygiene behaviour. Importance for public health. Mechanisms for change.* New York, USA: UNICEF
http://www.unicef.org/wes/files/behav.pdf
The authors explain why conventional hygiene education programmes seldom lead to safer hygiene practices. They discuss what makes people change their hygiene behaviours as individuals, groups and communities and present alternative types of programs. Special attention is paid to differences in socio-economic and cultural conditions, and the reason for a gender approach. The final chapter provides suggestions for politicians and managers, and stresses professional recognition, research gaps and opportunities for information exchange.

World Bank. 'Water, sanitation and hygiene at a glance.'
http://wbln0018.worldbank.org/HDNet/hddocs.nsf/c840b59b6982d2498525670c004def60/9d1422d8016e85d885256b90005e1f76?OpenDocument
Briefing paper addressing the effectiveness of hygiene promotion; do's and don'ts; key measures for the Millennium Development Goals, and key documents, references and key web sites.

World Bank, 'Water and Sanitation Programme (undated). Sanitation ladder'
Pictures of six increasingly advanced rural options to help male and female household members choose what they want and can afford. Each comes with information on basic characteristics, environmental suitability, advantages and disadvantages, materials possible, estimated capital and recurrent costs, expected lifespan, and responsibilities for upkeep to share within households. Social and gender aspects not included. Contact: Dr. Soutsakhone Chanthaphone at soutch@laotel.com
or well@irc.nl

Myriam Sidibe and Val Curtis (2002). 'Hygiene Promotion in Burkina Faso and Zimbabwe: New Approaches to Behaviour Change.' Field Note 7. World Bank, Water and Sanitation Programme
http://www.wsp.org/pdfs/af_bg_bf-zm.pdf
Comparison of two African hygiene promotion programmes that have successfully used new approaches: Programme Saniya in Burkina Faso, and ZimAHEAD in Zimbabwe. They both concentrated on understanding how people actually behave and hence how to change that behaviour, and they both demonstrated ideas that can be applied at a larger

scale. Comparison is on approach, level, cost, quantified benefits, sustainability and replicability.

WSSCC (2000) Sanitation Promotion Tool Kit.
'Geneva: Water Supply and Sanitation Collaborative Council'
http://www.wsscc.org/dataweb.cfm?edit_id=130&CFID=897367&CFTOKEN=13979283
The Sanitation Promotion Kit was made by the Working Group on Promotion of Sanitation as training- and background material for workshops, courses, etc. On-line content of the tool kit: (1) Responding to the sanitation challenge of the 21st century (2) Gaining Political Will (3) Doing better programmes (4) Sharing different approaches. Edited by Mayling Simpson Hébert and Sara Wood. E-mail: wsscc@who.int

TOP Websites

Environmental Health Project
http://www.ehproject.org/
EHP began a second five-year contract in June 1999 for the Office of Health, Infectious Diseases and Nutrition, Bureau for Global Health, USAID. Its objectives are to reduce mortality and morbidity in children under five and to provide access to a broad range of expertise in environmental health.

Its focus area is the development, implementation, and promotion of new and improved, cost-effective environmental health interventions. These concern especially the prevention of diarrhoeal disease through safe water supply, adequate sanitation and hygiene promotion at the household and community levels and control programs for malaria and other vector-borne diseases. EHP assists nongovernmental organizations (NGOs) and other groups working in health, population and the environment to link and integrate delivery approaches and activities, to make projects more effective and sustainable.

EHP's Information Center provides search and referral services to answer questions or gather information on environmental health, disseminates reports and publications, and manages information-sharing networks on key topics.
E-mail: info@ehproject.org

Healthlink Worldwide (UK) (formerly AHRTAG)
http://www.healthlink.org.uk/
Works in partnership with organisations in developing countries to improve the health and well-being of poor and vulnerable communities by strengthening the provision, use and impact of information.

HealthWrights (USA)
http://www.healthwrights.org
Non-profit organisation focussing on community health, disability, child-to-child approaches, awareness raising about poor health, networking, and development and distribution of educational materials on health and human rights (e.g. David Werner's "Where There Is No Doctor ").

HPRIN
http://www.phs.ki.se/hprin/
HPRIN provides links to Health Promotion Research Centres, Schools of Public Health and other Internet Resources of Interest for Exchange of Health Promotion Experiences or of Public Health Interest. HPRIN also manages a mailing list for group discussions as well as for fast distribution of information.

Hygiene Behaviour Network, in Global Applied Research Network in Water Supply and Sanitation (GARNET) (UK)

http://info.lut.ac.uk/departments/cv/wedc/garnet/grnttnc.html

Includes the full text of Hygiene Behaviour Network Newsletters and links to other organisations.

The International Scientific Forum on Home Hygiene

http://www.ifh-homehygiene.org/2003/

A network of scientists and healthcare professionals who play an active role in hygiene policy and scientific research. IFH emphasises the fundamental role that hygiene plays in preventing infection and disease, and promotes the understanding of correct hygiene principles and the application of appropriate hygiene procedures to situations where the risk of infection exists, with particular emphasis on hygiene procedures in the home. Its scope encompasses all aspects of home hygiene, including food hygiene and hygiene related to medical care in the community.

International Union for Health Promotion and Education (IUHPE)

http://www.iuhpe.nyu.edu/

The only global organisation entirely devoted to advancing public health through health promotion and health education. Has an established track record in advancing the knowledge base and improving the quality and effectiveness of health promotion and health education practice. Members range from government bodies, to universities and institutes, to NGOs and individuals across all continents. Provides links to relevant web sites including the International Public HealthWatch (IPHW) - a web site offering access to resources on public health and health promotion and the WWW Virtual Library with topic-specific and geographical resources in public health.

Managing the Environment Locally in Sub Saharan Africa - MELISSA (South Africa)

http://www.gm-unccd.org/FIELD/Bilaterals/Nor/Melissa.htm

Launched in 1996, the programme aims to support and facilitate the improvement of the local environment through partnership development and knowledge management. A balance between social equity, economic advancement and sustainable development is to ensure improved living conditions and a better quality of life for urban, peri-urban and rural citizens. MELISSA organized the African Sanitation and Hygiene Conference, Johannesburg, South Africa, 29 July - 1 August 2002 with as overall goal to accelerate sanitation and hygiene work in Africa in accordance with the Millennium Development Goals.

National Center for Infectious Diseases (USA)

http://www.cdc.gov/

Although meant for travellers from the USA, the site gives good general info on risks, causes and prevention. Factsheets on all infectious diseases– searchable by alphabet on the name of the disease.

Rehydration Project (Costa Rica)
http://www.rehydrate.org/
This non-profit international development group, based in Costa Rica, promotes the use of oral rehydration salts (ORS) in developing countries. Their site is claimed to be the world's largest knowledge base on diarrhoea and diarrhoea management. It provides access to all issues of Dialogue on Diarrhoea (1980-1995); fact sheets and background information on dehydration, rehydration, diarrhoea and breastfeeding; FAQs, news, and an extensive list of links.

Sanitation Connection
http://www.sanicon.net
Sanitation Connection is an Internet-based resource that gives you access to accurate, reliable and up-to-date information on technologies, institutions and financing of sanitation systems around the world. Institutions of international standing contribute to the information base by providing and maintaining a topic of their specialisation.

Soap Box
http://www.globalhandwashing.org/Publications/Soapbox%20Sept%202004.pdf
Newletter on the Public-Private Handwashing Campaign "WASH"

WASH
http://www.globalhandwashing.org
The Public-Private Partnership for Handwashing is a global initiative to promote handwashing with soap to reduce diarrhoea, a major cause of child mortality. It is funded through collaboration of the private sector, the Water and Sanitation Programme of the World Bank, the London School of Hygiene and Tropical Medicine, the Academy for Educational Development, UNICEF and the Netherlands Water partnership. Projects exist in Ghana, Nepal, Peru, Senegal and Indonesia. http://www.jhuccp.org/asia/pubs.shtml

Water, Engineering and Development Centre (WEDC) (UK)
http://www.jiscmail.ac.uk/lists/HEALTH-PROMOTION.html
http://www.jiscmail.ac.uk/cgi-bin/wa.exe
Archives of an E-conference on the Hygiene Improvement Framework and the list server for continued dialogue on hygiene promotion.
Related lists: Health for all, http://www.jiscmail.ac.uk/cgi-bin/wa.exe and Health Equity Network (HEN), http://www.jiscmail.ac.uk/lists/HEALTH-EQUITY-NETWORK.html
You need to join the network to access the information.
Email: helpline@jiscmail.ac.uk
Water Supply and Sanitation Collaborative Council
http://www.wsscc.org
A Geneva-based international network of professionals from South and North working in the drinking water supply, sanitation and hygiene sectors.

WHO - World Health Organization

http://www.who.int/hpr

http://www.who.int/water_sanitation_health/diseases/wshlinks.pdf

The first address links to a number of Health Promotion Networks. The second gives access to statistics on water, sanitation and hygiene related diseases.

World Water Day

http://www.worldwaterday.org/2001/links/health.html

Gives links to Health and Hygiene Promotion Organisations, Networks, Projects, Health and Hygiene Topics, Overviews and Statistics, as well as on main water, sanitation and hygiene related diseases.

WHO Tropical Diseases Department (WHO/CTD)

http://www.who.int/tdr/about/default.htm

Contains disease overviews and statistics including on some water related diseases such as dengue and malaria and new ways of prevention (e.g. treated betnets, contact willem.takken@wur.nl), http://ipmworld.umn.edu/chapters/curtiscf.htm

A field study by Bart Knols and Ernst-Jan Scholte in a village in Tanzania together with the Swiss Tropical Institute in Basel and Ifakara Health and Development Centre in Tanzania, and part of joint research of Wageningen and Edinburgh Universities and Imperial College, London, showed that with black cotton cloths impregnated with the spores of the fungus Metarhizium anisopliae and suspended from hut ceilings, the number of infectious mosquitoe bites decreases by about 75 percent and life span of mosquitoes is halved. Moreover, under laboratory conditions (as investigated in UK) the mosquitoes start to display different behaviour: they stop sucking blood and the parasites become so weak that they no longer make it into the mosquitoes' saliva.

The fungus is easy to cultivate on agar under local conditions. It is suspended in a vegetable oil and spayed onto the black cloth. At present this works for about a month, but research is going on to extend this to three months. The researchers think that this is a relatively simple and cheap method that complements existing methods of malaria prevention and could be promoted in due time.

TOP Contacts

The organisations mentioned below are all active in the hygiene education and promotion field.

CINARA Instituto de Investigación y Desarrollo en Agua Potable Saneamiento Basico y Conservasión del Recurso Hidrico
http//www.cinara.univalle.edu.co/ (Spanish) COULD NOT BE OPENED ON 16/8
Dirección Postal: AA. 25157
Teléfonos:(57) (2) 3392345 - 3396096 - 3393196 - 3301986
Fax:(57)(2)3393289
E-mail: cinarauv@univalle.edu.co
see also: http://www.globenet.org/preceup/pages/fr/chapitre/etatlieu/approchr/h/aang.htm

COSI Foundation for Technical CO-operation
COSI Foundation for Technical CO-operation in Sri Lanka is an organisation aiming at providing support services to the sector of rural infrastructure development, with water and sanitation being the main area of focus. COSI is active and specialised in training, applied research, evaluation, designing and supervision of water supply projects.
COSI Foundation for Technical CO-operation
P.O.Box 03
Katugastota 20800
Sri Lanka
Phone: + 94 (0) 8493829
Fax: + 94 (0) 8493830
E-mail: cosi@kandy.ccom.lk

CREPA Centre Régional pour l'eau potable et l'Assainissement à faible coût
http://www.oieau.fr/crepa/ (French)
03 BP 7112, Ouagadougou 03, Burkina Faso
Tel: (226) 366210/11
Fax: (226) 366208
E-mail: crepa@fasonet.bf

EHP Environmental Health Project
http://www.ehproject.org
The Environmental Health Project (EHP) began a second five-year contract in June 1999, under the direction of the Office of Health, Infectious Diseases and Nutrition in USAID's Bureau for Global Health (BGH/HIDN). EHP provides access to a broad range of capabilities for missions and bureaus wishing to include environmental health preventive components in health or environment programmes, while at the same time advancing the state-of-the-art of these components.
1611 North Kent St., #300a
Arlington, VA 22209 USA.

Tel: (703) 247-8730
Fax: (703) 243-9004
E-mail: info@ehproject.org

IRC International Water and Sanitation Centre

http://www.irc.nl

IRC is an independent, non-profit organisation supported by and linked with the Netherlands Government, the United Nations Development Programme, the United Nations Children's Fund, the World Health Organization, the World Bank and the Water Supply and Sanitation Collaborative Council. IRC facilitates the sharing, promotion and use of knowledge so that governments, professionals and organisations can better support poor men, women and children in developing countries to obtain water and sanitation services they will use and maintain (new mission statement 2002). Using its web site, documentation, publications, IRC advocates change and aims to improve the information and knowledge base of the sector.

E-mail: general@irc.nl
or Dick de Jong, jong@irc.nl

International Scientific Forum on Home Hygiene

http://www.ifh-homehygiene.org/2003/2newsletter/letter.htm

The IFH is a non-profit, non-government organisation comprising scientists and health care professionals who play an active role in hygiene policy and scientific research. Its activities are developed in consultation with an advisory board of hygiene experts drawn from Europe, the USA and South Asia. Newsletter: Home Hygiene and Health News

The Institute of Water and Sanitation Development (IWSD)

http://www.iwsd.co.zw/

The IWSD is a non-profit making non-governmental organisation based in Zimbabwe but operating throughout the Southern Africa. The Institute aims to assist in the achievement of sustainable development of water resources and waste management through the provision of support to development agencies in Zimbabwe and the Southern Africa region in the form of training, research, advisory services and information dissemination.

7 Maasdorp Avenue, Alexandra Park, Harare
Box MP422, Mount Pleasant
Harare, Zimbabwe.
Tel/Fax 263-4-735017, 735026, 735035,250522
E-mail: admin@iwsd.co.zw

LSHTM London School of Hygiene and Tropical Medicine

http://www.lshtm.ac.uk

As an internationally renowned centre of excellence in public health and tropical medicine the London School provides a stimulating environment in which to carry out research training. Students wishing to acquire skills necessary for a career in academic research undertake PhD and MPhil degree courses at the School. Increasingly, students are

choosing the DrPH (Doctorate in Public Health) programme designed to train future leaders in public health.
Keppel Street
London WC1E 7HT
United Kingdom
Tel: +44 (0) 20 7636 8636
Special website
http://www.lshtm.ac.uk/dcvbu/hygienecentre/index.html

NETWAS - Network for Water and Sanitation
http://www.netwas.org/
A capacity building and information network for Africa focusing on water, sanitation and hygiene. The NETWAS group consists of a regional centre NETWAS International and two national centres - NETWAS Uganda and NETWAS Tanzania. Work in Hygiene Promotion include a training course, Promotion of Hygiene and Environmental Sanitation: Planning and Management for Behavioural Change , networking and information sharing, research (http://www.irc.nl/projects/susthygb/nl/02/netwas.html) and various consultancies.
NETWAS International
Magadi Road, Off Langata Road
P.O. Box 15614-00503 Mbagathi
Nairobi, Kenya
Tel: 254-2-890555/6/9/60
Fax: 254-2-890553/54
E-mail: netwas-international@netwas.org OR netwas@nbnet.co.ke

NGO Forum for Drinking Water Supply & Sanitation
http://www.ngoforum-bd.org/
NGO Forum is a non-governmental apex coordinating and service delivery agency with around 600 partner NGOs, CBOs and private sector actors and overall more than 38,000 workers. Backstopping includes training and provision of information, promotional and training materials on water and sanitation technologies.
4/6, Block - E, Lalmatia, Dhaka - 1207, Bangladesh.
Tel: 880-2-8119597, 880-2-8119599
Fax: 880-2-8117924
E-mail: ngof@bangla.net & ngofaic@bangla.net

PCWS - ITN Foundation Philippine Center for Water and Sanitation
http://www.itnphil.org.ph
PCWS' mission is: To serve as a leading catalyst of resource centres advocating and promoting sustainable water and sanitation programmes through gender and poverty-sensitive capability building approaches. Post address:
P3 Minnesota Mansion
267 Ermin Garcia Street
Cubao, Quezon City, Philippines 1109
Visiting Address:

Manila, Philippines
Tel: +632 911-5783
Fax: +632 911-5783
E-mail: itnphil@compass.com.ph

WaterAid

http://www.wateraid.org.uk

WaterAid is the UK's only major charity dedicated to the provision of safe domestic water, sanitation and hygiene promotion to the world's poorest people. It does so with partners through projects, which integrate domestic water provision, sanitation, and hygiene promotion so that health benefits are maximised. Its briefing paper on hygiene promotion gives examples of creative one-way communication channels rather than a systematic approach into programme planning and implementation. Monitoring effects is stressed. An overview of how this can be planned and realised is not yet included. WaterAid
Prince Consort House, 27-29 Albert Embankment
London, SE1 7UB
United Kingdom
Tel: +44 (0) 20 7793 4500
Fax: +44 20 7793 4545
E-mail: wateraid@wateraid.org.uk

WEDC The Water, Engineering and Development Centre

http://www.lboro.ac.uk/wedc/index.htm

WEDC is one of the world's leading institutions concerned with education, training, research, and consultancy relating to the planning, provision, and management of infrastructure for development in low- and middle-income countries.
WEDC is devoted to activities that improve the health and well-being of people living in both rural areas and urban communities. The centre encourages the integration of technological, environmental, social, economic, and management inputs for effective and sustainable development.
WEDC, Loughborough University
Leicestershire LE11 3TU UK
Tel: + 44 (0) 1509 222885
Fax: + 44 (0) 1509 211079
E-mail: WEDC@lboro.ac.uk

WELL

http://www.lboro.ac.uk/orgs/well/index.htm

WELL is a resource centre funded by the UK Department for International Development (DFID), promoting environmental health and well-being in developing and transitional countries, managed by WEDC, LSHTM and IRC in collaboration with eight network partners. WELL is designed to co-ordinate and provide services for water, sanitation and environmental health programmes to DFID and other agencies. The WELL web site is a focal point of information about water and environmental health and related issues in developing and transitional countries.

Loughborough University
LeicestershireLE11 3TU
United Kingdom
Tel: (+ 44) 1509 222633
Fax: (+ 44) 1509 211079
E-mail: well@lboro.ac.uk

WSSCC - Water Supply and Sanitation Collaborative Council
http://www.wsscc.org/
The Water Supply and Sanitation Collaborative Council is a leading international organisation that enhances collaboration in the water supply and sanitation sector, specifically in order to attain universal coverage of water and sanitation services for poor people around the world. WSSCC is a cross between a professional association and an international NGO. It operates with a mandate from the United National General Assembly.
International Environment House
Chemin des Anémones 9
1219 Châtelaine
Geneva - Switzerland
Tel : +41 (0)22 917 8657
Fax : +41 (0)22 917 8084
E-mail: wsscc@who.int

University of Leeds
Research and training on health education. Health Education Database.
Dr John Hubley.
21 Arncliffe Road
Leeds LS16 5AP, UK
Email: john@hubley.co.uk

University of Southhampton
Research on gender issues in the promotion of hygiene and sanitation amongst the urban poor. http://www.eng4dev.soton.ac.uk/research.html
Email: Ben Fawcett, , bnf@soton.ac.uk

TOP Courses and conferences

CREPA, Burkina Faso
http://www.pseau.org/formations/formation_detail.asp?formation_id=93
Three weeks' training course in French, "Promotion de l'hygiène"

COSI Foundation for Technical CO-operation
COSI is active and specialised in training, applied research, evaluation, designing and supervision of water supply projects. Period short course in hygiene promotion. See TOP Contacts.

IRC International Water and Sanitation Centre (The Netherlands) and partners abroad
http://www.irc.nl/products/training/index.html
Hygiene Education and Promotion: Planning and Management for Behavioural Change (IRC). A two-week training course organised as per demand in Africa (locations: Burkina Faso and Kenya), Asia (location: Sri Lanka) and Latin America (location: Colombia).

Medicus Mundi (The Netherlands)
http://www.healthtraining.org/
Health Training: Postgraduate Training Programmes in International Health. For more information on Medicus Mundi: http://www.medicusmundi.org/.

NCWSTI National Community Water and Sanitation Training Institute, Sovenga, South Africa
http://www.nuffic.nl/prisma/inst/i0004676.htm
The National Community Water and Sanitation Training Institute in South Africa is an independent, non-profit organisation, established in September 1996. NCWSTI is the national centre of expertise and research to the impact of education and training programmes, community training requirements, and training contents. The mission of NCWSTI is to build capacity in the water and sanitation sector in collaboration with other key players by the empowerment of people through the development of competencies in an efficient and cost effective manner.

NETWAS
http://www.netwasgroup.com/products_and_services/products_and_services
NETWAS in Kenya is the centre of the International Training Network for Water and Waste Management (ITN) for Eastern Africa. NETWAS is committed to assisting existing sector institutions in building capacities for sector-related training and information exchange.
NETWAS
P.O.Box 15614
Nairobi
Kenya
Phone: + 254 (0) 2 890 555/6/7

Fax: + 254 (0) 2 890553/4
E-mail: netwas@nbnet.co.ke

Royal Tropical Institute (KIT)
http://www.kit.nl/
KIT conducts research, training and advisory services in health, education, sustainable economic development, and social development and gender equity.
Forthcoming short couses include disease control 6-24 June 2005, on how to retain the strengths of disease conyrol programmes while moving ahead towards more integrated and sector wide approaches, and international and tailor made training on gender, development and participatory governance. For more information: gender@kit.nl.
http://www.kit.nl/frameset.asp?/development/html/gdpg.asp&frnr=1&

KIT Development Policy and Practice
P.O. Box 95001
1090 HA Amsterdam
The Netherlands
Visiting address
Mauritskade 63
Amsterdam
Telephone +31 20 5688 458
Fax +31 20 5688 444
E-mail: development@kit.nl

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TOP Quiz on Hygiene Promotion

Try it before you read the Overview Paper, but do not check your answers until after you have finished briefing yourself on the TOP pages. Make a note of your answers and check how you got on by referring to the answers and scores on the following pages.

Questions

1. Diarrhea is a still one of the most important causes of death for children in the developing world. Is it
A. The first cause of death?
B. The second cause of death?
C. The third cause of death?

2. When hygiene promotion is combined with improved water supply and sanitation, the estimated annual household cost to avoid diarrhea in children under five is
A. US $ 10
B. US $ 6
C. US$ 3

3. TRUE or FALSE:
Teaching families how germs spread disease is the most effective way to change their hygiene behavior.

4. In a village where diarrhea epidemics are frequent, which one of the following three actions will have the biggest impact on improved health?
A. Improving the quality of the water supply
B. Increasing the amount of water available to each household
C. Improving sanitation practices

5. How many people in the world were without access to hygienic sanitation facilities in the Year 2000?
A. 2.4 million
B. 24 million
C. 240 million
D. 2,400 million

6. TRUE or FALSE:
Mass campaigns highlighting risky practices via TV, radio, newspapers, posters, street theatre, and other mass media is the best way for many people to quickly adopt good hygiene practices.

7. TRUE or FALSE:
The best way to identify the most risky hygiene practices for a hygiene programme is through direct contacts in a door-to-door survey.

8. TRUE or FALSE:
Hygiene promotion programmes do not always need to include technologies for improved water supply and sanitation.

9. TRUE or FALSE:
Hygiene promotion programmes are the responsibility of health education specialists in a health agency.

10. What is the best way to measure the impact of a hygiene promotion programme?
A. A health impact study
B. A KAP (Knowledge, Attitudes, Practices) study
C. A behavioral change study

TOP Quiz answers and scores

Question 1
Diarrhea is still the second cause of death for children under five (first cause is respiratoral diseases). It is also the cause on which spectacular progress is possible through a combination of promoting good hygiene when they are healthy (so they do not fall ill with diarrhea) and promoting oral rehydration once they are ill (to stop them from dying because they loose too much fluids)
SCORE 1 point for B

Question 2
A programme/project investment of US$3 per family per year on hygiene promotion is enough when families have already access to safe sanitation, safe water for drinking and enough water for hygiene (irrespective whether this is of a lesser quality). If these conditions are not present, better hygiene is still possible but requires an estimated investment on hygiene promotion of US $ 6 per household per year
SCORE 1 point for C

Question 3
Knowing how germs spread does not make people change hygiene behavior if that brings a lot of inconvenience or social or economic hardships. And many people adopt good hygiene without knowing germ theories. Self-respect, appreciation from others, learning from parents, friends and in school, a better life, and good facilities are more important motivating factors than academic knowledge.
SCORE 1 point for FALSE

Question 4
All the interventions will have some impact, but better sanitary practices (safe disposal of human excreta, including of babies and infants, and washing hands after defecation and before handling food) have the greatest impact on reduction of diarrhea. Providing more water so that it is available for washing hands and babies bottoms has a bigger impact than improving the water quality. Best of all, of course, is to do all three and accompany them with good hygiene promotion.
SCORE 1 point for C

Question 5
2,400 millions or 2,4 billion people, 40% of the world 's population lacked any form of improved sanitation at the end of the 20th Century, according to statistics compiled by the World Health Organization and UNICEF.
SCORE 1 point for D

Question 6
Well-planned mass media campaigns designed to reach all sections of the community are useful for spreading one or two key messages (dispose of all stools safely, wash hands with soap or ash after contact with stools) across a wide audience, but their impact on behavior is often short-lived. It is when people make their own decisions to change through informed decision making that the hygienic practice is most likely to be sustained.
SCORE 1 point for FALSE

Question 7
Hygiene is a sensitive personal issue, and people will not readily discuss it with a doorstep interviewer, or answer truthfully on a questionnaire. The best ways to gather information on risk practices and understand underlying reasons include observations and discussions through participatory activities. An example is doing an environmental walk with groups of villagers, noting exposed feces, children defecating, the condition of water sources and latrines, etc. and discussing why such practices occur. Another example is a checklist observation in which team members (which may include village women and men) to note risky behaviors at a series of selected sites and compare notes, then do structured observations to assess the frequency of the risky practices identified. A third example is asking fathers and mothers to demonstrate their practices with life objects (e.g. for storing and drawing drinking water) or to score safe and risky practices with the help of card sorting or pocket voting and discuss how gender responsibilities are divided.
SCORE 1 point for FALSE

Question 8
Yes, it is possible to improve risky hygiene practices without introducing additional hardware. Getting good results is however more difficult and costly when some conditions for practicing good hygiene are not in place. In such cases, a hygiene promotion programme can stimulate the improvement of water supply and sanitation facilities with available local resources and/or focus on practices that can be improved within the given water supply and sanitation conditions. The opposite is not true, however. Programmes

which enable community men and women to install and sustain improved water and sanitation facilities contribute to better hygiene. However, installation, use and maintenance alone seldom reduce all risky practices. Additional hygiene promotion remains needed.
SCORE 1 point for TRUE

Question 9
Many different agencies, including engineering agencies, and male and female professionals with many different professional backgrounds can practice hygiene promotion as long as they acquire the required expertise. Institutionally, the most important are a sufficiently long commitment, dedicated and skilled teams, participatory and gender and poverty sensitive strategies, a team approach with staff involved in water supply and/or sanitation, and clear and measurable objectives which relate to the amount of time and resources available.
SCORE 1 point for FALSE

Question 10
A behavioral change study is best as it focuses on the actual goal of hygiene promotion: fewer risky and more healthy practices. Moreover, both baseline and follow-up measurements can be done together with the target groups. The joint outcome analysis and the planning, implementing and evaluating of follow-up action help promote progress. Health impact studies only make sense after a sufficient proportion of women, men and children have adopted a sufficient number of good practices over a sufficiently long time. Impact studies are also not easy to carry out. KAP studies measure also Knowledge and Attitudes. However, only the Practices directly influence people 's health. When knowledge improves, practices and attitudes do not necessarily improve as well. People may have their own good reasons not to change, if the new practice is inconvenient or unaffordable.
SCORE 1 point for C

TOTAL SCORE

Is your total score less than 3?
Then hygiene promotion may be a new subject for you or a subject in which you may want to update your knowledge.

Is your total score between 4 and 6?
Congratulations! You are quite knowledgeable, but may want to familiarize yourself with more recent facts and/or insights.

Is your score between 7 and 9?
You are an experienced colleague and much of the contents of this paper is likely to be familiar. You may, however, like to read about the experiences of others and add your own.

Is your score 10?

Then you may decide that this paper is not particularly interesting to you as it's all common knowledge! But you may also wish to see if it has still other interesting things to offer, including gaps that can be filled or issues that can be developed further. For all of you who have done this quiz: thanks for participating. We hope you found the questions and answers interesting and relevant and we warmly welcome any reactions.

Appendices

1. Hygiene promotion manual - UNICEF
2. WELL fact sheet: fallacies and key principles of hygiene promotion
3. Definitions
4. WASH facts and figures
5. More arguments for hygiene and sanitation promotion
6. Preventive measures against the spread of water and sanitation related diseases
7. Trachoma
8. Some key objectives for hygiene promotion programmes
9. Participatory tools and techniques
10. The PHAST approach
11. SARAR
12. Participatory Rural Appraisal (PRA)
13. Advocacy

Appendix 1. Hygiene promotion manual - UNICEF

UNICEF Water, Environment and Sanitation Technical Guidelines Series
Hygiene Promotion Manual

Download, or view online, the entire document (requires Adobe Acrobat Reader):

- English (1.3 MB) (http://www.unicef.org/programme/wes/pubs/glines/hman.pdf)
- French (pending)
- Spanish (pending)

http://www.unicef.org/wes/files/hman.pdf

This manual presents methodologies to assist development workers in the promotion of behavioural change for safer hygiene practices, and to help make hygiene promotion programmes more effective. The objective of the manual is to provide a tool that will contribute towards a reduction in diarrhoeal diseases, one of the top three killer diseases in developing countries, and thus a reduction in child mortality. The manual describes a methodology for bottom-up programming for hygiene promotion: first finding out what people know about hygiene through formative research in people's knowledge and practices, and then combining this with state-of-the-art expert knowledge and appropriate communication strategies to develop effective and sustainable programming models. The manual is accessible and jargon-free: its audience includes all professionals interested in the area of hygiene promotion.

Happy, Healthy and Hygienic was produced in partnership with the London School of Hygiene and Tropical Medicine and the Ministry of Health of Burkina Faso.

Table of Contents Introduction: New Ways of Promoting Safe Hygiene
Chapter 1: What is Hygiene Promotion?
Chapter 2: Six Steps to Hygiene Promotion
Chapter 3: Risk Practices
Chapter 4: Practices to target
Chapter 5: Motivating Behaviour Change
Chapter 6: Communicating Hygiene
Conclusion: Hygiene Promotion: Practical and Effective

Appendix 2. WELL fact sheet: fallacies and key principles of hygiene promotion

http://www.lboro.ac.uk/orgs/well/resources/fact-sheets/fact-sheets-htm/hp.htm

Fallacies

Fallacy no. 1. Adults are 'clean slates' on which to write new ideas. All societies already have their own explanations for diarrhoeal diseases, and rationalisations for their existing practices. People will reject messages that simply contradict these views.

Fallacy no. 2. Adults have the time and motivation to learn new ideas. Traditional school-type teaching is of little value to hard-pressed mothers, who have other uses for their time and energy.

Fallacy no. 3. New knowledge equals new practice. Fear of germs or disease is rarely a strong enough motivation to change domestic practices. The change may also be too expensive or time-consuming, and there may be discouragement from other members of society.

Fallacy no. 4. A whole variety of hygiene practices should be encouraged. Only a limited number of hygiene practices are likely to be responsible for most diarrhoeal episodes, but hygiene education programmes rarely seek to identify them and target them specifically. Getting people to change the habits of a lifetime is extremely difficult; the effort should not be diluted by targeting too many practices.

Fallacy no. 5. Health education can be added-on. Education sessions are often organised to fit in with other activities such as building a well or a mother's visit to a health clinic, and are often tacked on to a programme as an afterthought. Little thought is given to the cost, the potential population coverage and clear targets are rarely set. Building on field experience in Africa and Asia, researchers associated with WELL have developed a new approach, called hygiene promotion. Instead of beginning in an office, programme design begins in the community, finding out what people know, do and want. The approach works well in a participatory, village-by-village manner. However, it is most useful and cost-effective on a large scale, where the intervention is first developed locally, by participatory research, and then applied across regions or urban centres.

Key principles

1. Target a small number of risk practices.

From the viewpoint of controlling diarrhoeal disease, the priorities for hygiene behaviour change are likely to include handwashing with soap (or a local substitute) after contact with stools, and the safe disposal of adults' and children's stools.

2. Target specific audiences.
These may include mothers, children, older siblings, fathers, opinion leaders, or other groups. One needs to identify who is involved in childcare, and who influences them or takes decisions for them.

3. Identify the motives for changed behaviour.
These motives often have nothing to do with health. People may be persuaded to wash their hands so that their neighbours will respect them, so that their hands smell nice, or for other motives. By working with the target groups one can discover their views of the benefits of the safer hygiene practices. This provides the basis for a motivational strategy.

4. Hygiene messages need to be positive.
People learn best when they laugh, and will listen for a long time if they are entertained. Programmes, which attempt to frighten their audiences, will alienate them. There should therefore be no mention of doctors, death or diarrhoea in hygiene promotion programmes.

5. Identify appropriate channels of communication.
We need to understand how the target audiences communicate. For example, what proportion of each listens to the radio, attends social or religious functions, or goes to the cinema? Traditional and existing channels are easier to use than setting up new ones, but they can only be used effectively if their nature and capacity to reach people are understood.

6. Decide on a cost-effective mix of channels.
Several channels giving the same messages can reinforce one another. There is always a trade-off between reach, effectiveness and cost. Mass media reach many people cheaply, but their messages are soon forgotten. Face-to-face communication can be highly effective in encouraging behaviour change, but tends to be very expensive per capita.

7. Hygiene promotion needs to be carefully planned, executed, monitored and evaluated.
At a minimum, information is required at regular intervals on the outputs (e.g. how many broadcasts, house visits, etc.), and the population coverage achieved (e.g. what proportion of target audiences heard a broadcast?). Finally, indicators of the impact on the target behaviours must be collected.

These fallacies and key principles have been abstracted from the WELL Fact Sheet on Hygiene Promotion. The complete document is online available (http://www.lboro.ac.uk/orgs/well/resources/fact-sheets/fact-sheets-htm/hp.htm).

Appendix 3. Definitions

"Health education is the process of interaction between people in order to discuss their health situation, with the aim to create awareness about health status and to decide jointly how this situation can be improved" (Timmermans and de Walle, 1995: 278)

"Hygiene education is ..all activities aimed at encouraging behaviour which will help to prevent water and sanitation- related diseases" (Boot and Cairncross, 1993: 33)

"Hygiene promotion is the planned approach to preventing diarrhoeal and other water and sanitation related diseases through the widespread adoption of safe hygiene practices" (Adjusted from Curtis and Kanki, 1998: 10)

These are some of the more recent definitions on the promotion of better health and hygiene. In these definitions, health refers to what the World Health Organizes defines as 'a state of complete physical, mental, and social well-being and not merely the absence of disease, or infirmity'.(online available http://www.who.int/hpr/ageing/Men Ageing and Health.doc). Hygiene comes from the Greek hygieinos, which translates literally as 'healthful'. The term has, however, come to mean "the practice of keeping oneself and one's surroundings clean, especially to prevent illness or the spread of diseases" (Boot and Cairncross, 1993: 6).

While health education and promotion thus stand for the encouragement, in many different ways, of a better overall well-being, hygiene education and promotion relate especially to reduction of infectious diseases spread through unhygienic conditions and practices. Infectious diseases are the world's leading cause of death. http://www.un.org/Pubs/CyberSchoolBus/special/health/index.html

In 1997, at least 17.3 million, ore one third of 52.2 million women, children and men died from these diseases. Among them, diseases related to poor hygiene, sanitation and water supply, are highly prevalent, especially diarrhoeas. Table 1 gives information on how much these incidences can be reduced by improving sanitation, hygiene, and the use of more and safer water.

In the above definitions, the terms hygiene "education" and "promotion" are both used for activities and programmes that encourage better hygiene. In this paper, we give preference to the term hygiene promotion because hygiene education is often still used in its narrow meaning of spreading information and giving instructions. On their own, these activities are seldom suitable to bring about lastingly improved conditions and practices.

Appendix 4. WASH facts and figures

1. billion people in the world do not have access to safe water, roughly one-sixth of the world's population.
2. 2.4 billion people in the world do not have access to adequate sanitation, about two-fifths of the world's population.
3. 2.2 million people in developing countries, most of them children, die every year from diseases associated with lack of access to safe drinking water, inadequate sanitation and poor hygiene.
4. Some 6,000 children die every day from diseases associated with lack of access to safe drinking water, inadequate sanitation and poor hygiene – equivalent to 20 jumbo jets crashing every day.
5. At any one time it is estimated that half of the world's hospital beds are occupied by patients suffering from water-borne diseases.
6. 200 million people in the world are infected with schistosomiasis, of whom 20 million suffer severe consequences. The disease is still found in 74 countries of the world. Scientific studies show that a 77% reduction of incidence from the disease was achieved through well-designed water and sanitation interventions.
7. The average distance that women in Africa and Asia walk to collect water is 6 km.
8. The weight of water that women in Africa and Asia carry on their heads is the equivalent of your airport luggage allowance (20kg).
9. The average person in the developing world uses 10 litres of water a day.
10. The average person in the United Kingdom uses 135 litres of water every day.
11. One flush of your toilet uses as much water as the average person in the developing world uses for a whole day's washing, cleaning, cooking and drinking.
12. Comparative costs: In Europe $11 billion is spent each year on ice cream; in USA and Europe, $17 billion is spent on pet food; in Europe $105 billion is spent annually on alcoholic drinks, ten times the amount required to ensure water, sanitation and hygiene for all.
13. In the past 10 years diarrhoea has killed more children than all the people lost to armed conflict since World War II.
14. In China, India and Indonesia twice as many people are dying from diarrhoeal diseases as from HIV/AIDS.
15. In 1998, 308,000 people died from war in Africa, but more than two million (six times as many) died of diarrhoeal disease.
16. The population of the Kibeira slum in Nairobi, Kenya pay up to five times the price for a litre of water than the average American citizen.
17. An estimated 25% of people in developing country cities use water vendors purchasing their water at significantly higher prices than piped water.
18. Projections for 2025 indicate that the number of people living in water-stressed countries will increase to 3 billion – a six-fold increase. Today, 470 million people live in regions where severe shortages exist.
19. The simple act of washing hands with soap and water can reduce diarrhoeal disease by one-third.

20. Following the introduction of the Guatemalan Handwashing Initiative in 1998, there were 322,000 fewer cases of diarrhoea each year amongst the 1.5 million children under 5 nationwide in the country's lowest income groups.
21. In Zambia, one in five children die before their fifth birthday. In contrast in the UK fewer than 1% of children die before they reach the age of five.
22. A study in Karachi found that people living in areas without adequate sanitation who had no hygiene education spend six times more on medical treatments than those with sanitation facilities.
23. Waterborne diseases (the consequence of a combination of lack of clean water supply and inadequate sanitation) cost the Indian economy 73 million working days a year. And a cholera outbreak in Peru in the early 1990s cost the economy US$1 billion in lost tourism and agricultural exports in just 10 weeks.
24. Improved water quality reduces childhood diarrhoea by 15-20% BUT better hygiene through handwashing and safe food handling reduces it by 35% AND safe disposal of children's faeces leads to a reduction of nearly 40%.
25. At any time, 1.5 billion people suffer from parasitic worm infections stemming from human excreta and solid wastes in the environment. Intestinal worms can be controlled through better sanitation, hygiene and water. These parasites can lead to malnutrition, anaemia and retarded growth, depending upon the severity of the infection.
26. It is estimated that pneumonia, diarrhoea, tuberculosis and malaria, which account for 20% of global disease burden, receive less than 1% of total public and private funds devoted to health research.
27. Ecological sanitation is one option being practised in some communities in China, Mexico, Vietnam, etc. Excreta contain valuable nutrients. We produce 4.56 kg nitrogen, 0.55 kg phosphorous, and 1.28 kg potassium per person per year from faeces and urine. This is enough to produce wheat and maize for one person every year.
28. One gram of faeces can contain: 10,000,000 viruses, 1,000,000 bacteria, 1,000 parasite cysts, 100 parasite eggs.

Sources:
5, 7, 8, 9, 10, 11, 13, 14, 15, 21, 22, 23, 24, 25: WaterAid
6, 25: WELL Technical Brief
(http://www.lboro.ac.uk/well/services/tecbriefs/factoids.htm)
16: Water for African Cities presentation, Stockholm Water Symposium, August 2001
12: Vision 21 – Water For People, March 2000, WSSCC
1, 2, 3, 4, 19: WHO/UNICEF/WSSCC Global Water Supply and Sanitation Assessment 2000 Report
17: WELL Planned Work studies 163 and 164.
20: Saadé et al (2001) The Story of a Successful Public-Private Partnership in Central America: Handwashing for Diarrhoeal Disease Prevention. BASICS, EHP, UNICEF, USAID and The World Bank
27: Esrey and Andersson (1999), Environmental Sanitation from an Ecological Systems Approach 26: (10/90 Report on Health Research, 2000. Global Forum for Health

Research)
18: (IHE Newsletter, January 2001)
28: Advocating Sanitation - how, why and when? Sanitation Connection (http://www.sanicon.net/titles/topicintro.php3/topicId=1).

For more information:
Water Supply and Sanitation Collaborative Council c/o WHO (CCW),
Http://www.wsscc.org
20 Avenue Appia,
CH-1211 Geneva 27
Switzerland.
Tel. +41 22 791 3544
Fax +41 22 791 4847
E-mail: wsscc@who.ch

Appendix 5. More arguments for hygiene and sanitation promotion

Sandy Cairncross and Valerie Curtis, London School of Hygiene and Tropical Medicine

Why promote hygiene and sanitation?

Hygiene

See (especially Table 1):
http://www.wsscc.org/dataweb/internal/Media%20and%20communications/publications/Sani_Hygiene_Promo_final.pdf

Sanitation

See http://www.sanicon.net/themes/intro.php3?theme=1
Sanitation has to be marketed like any consumer good. Most people know and want toilets. However, toilet acquisition may not be a priority item of expenditure, especially for the poor. People want sanitation for reasons that include convenience, privacy, aesthetics and status.
See also: http://www.wsp.org/publications/eap_myth.pdf
http://www.wsp.org/publications/af_latrines.pdf
http://www.sanicon.net/titles/title.php3?titleno=206

The case studies of WEDC on sanitation demand contain interesting field information on effective demand vs. taking up what is offered
http://wedc.lboro.ac.uk/projects/new_projects3.php?id=36&url=../specialist-activities/interests.php?area=9
Contact: Ian Smout, i.k.smout@lboro.ac.uk

The removal of excreta from living spaces has major health benefits, not just to individual families but also to their neighbours. Such externalities amply justify the use of public funds for latrine promotion. See http://www.sanicon.net/themes/intro.php3?theme=1

Similarly schools sanitation confers public benefits by improving health and increasing school enrolment. See http://www.irc.nl/page/9579

Those who lack it do not always realise that they need it or can afford it. Excreta disposal has important health benefits, but there are substantial externalities - my latrine protects my neighbours from my excreta - which more than justify the use of public funds to promote it. Sanitation is also about more than health; benefits include convenience, privacy and security for women, and (for school sanitation) increased school enrolment.

Appendix 6. Preventive measures

Measures against the spread of water and sanitation related diseases:

Infection	**Major preventive measures**					
	Safe excreta disposal	Personal hygiene	Domestic hygiene	Food hygiene	Water hygiene	Safe waste water disposal and drainage
Diarrhoeas	*	*	*	*	*	
Guinea worm					*	
Hookworm	*		*			
Ringworm		*	*			
Round- and whipworm	*	*	*	*		
Tapeworms	*			*		
Bancroftian filariasis	*		*			*
Dengue			*			*
Malaria			*			*
Scabies		*	*			
Schistosomiasis	*	*	*			
Typhoid	*	*	*	*	*	
Trachoma and conjunctivitis		*	*			
Yaws		*	*			
Yellow fever			*			*

Source: Boot and Cairncross, 1993:11

Appendix 7. Trachoma

Source: http://www.cdc.gov/ncidod/dbmd/diseaseinfo/trachoma_t.htm

Trachoma is a chronic eye infection that leads to permanent scars in the conjunctiva and cornea. Repeat active infections occur in children < 10 years of age. Subsequently, conjunctival scarring and inversion of the eyelashes so they irritate the cornea (trichiasis) develops as a result of earlier infections. Trichiasis predisposes to corneal ulceration and corneal opacities resulting in decreased vision and blindness. WHO estimates that approximately 6 million cases of blindness due to trachoma and 11 million cases of trichiasis occur yearly. Prevalence of active disease in children varies from 10-40% in some African countries to 3-10% in several Asian countries. The overall incidence is unknown.

Repeat infections result in a chronic follicular conjunctivitis that leads to scarring in the conjunctiva and cornea. Ultimately, corneal opacification and blindness occurs.Transmission:

Primary: person-to-person transmission by ocular and respiratory secretions.

Secondary: insect vectors such as house flies. Active infection occurs in children < 10 years, reinfection during childhood is common. Endemic disease is found in rural areas with limited economic means and poor sanitation and water supplies.

Trends: unknown. WHO has initiated a global campaign for the elimination of blindness due to trachoma, GET2020, that recommends a strategy including antibiotics, improved personal and community hygiene and sanitation, and surgery to correct trichiasis. Campaign challenges include: establishing surveillance for endemic trachoma, determining when mass treatment with antibiotics is necessary (i.e., retreatment), determining the effectiveness of improved hygiene and sanitation at preventing a resurgence of endemic disease, monitoring for adverse effects of mass treatment with antibiotics, and improving surgical outcomes. Additional challenges include: improving diagnosis of active disease, monitoring the emergence of antibiotic resistant C. trachomatis, and improving our understanding of the transmission and reservoirs of C. trachomatis. This page last reviewed July 2, 2002

Source: US Government, Centers for Disease Control and Prevention, National Center for Infectious Diseases, Division of Bacterial and Mycotic Diseases.

Appendix 8. Some key objectives for hygiene promotion programmes

Safe excreta disposal

Using only safe methods of human excreta disposal protects the quality of surface water. It reduces water treatment costs. Most importantly, it prevents the spreading of various types of diarrhoeas and worms, typhoid and paratyphoid and schistosomiasis (also known as bilharzia) and Bancroftian filariasis. Impacts depend on degree of universality - to what extent are safe methods used:

- By all people? Practised by the elderly, the adult men and women, adolescent girls and boys, and young children, and including safe disposal of babies' stools, in lower, middle and upper class households of any religion/caste/ethnic group?
- At all times? During all seasons and times of night and day?
- In all locations? At home, in the field, at school, when travelling?

Practising safe excreta disposal is always important. The greatest benefits are, however, for children under five (who run the greatest risks) and people in areas that are densely settled, areas in which children and grown-ups often use land and/or water sources for urination and defecation, and areas which have a wet and hot climate. Colwell (2001) showed, for example, that cholera epidemics in South America occurred when El Niño brought higher temperatures. To enhance safe excreta disposal practices, a range of facilities, also called the sanitation ladder, can be promoted to suit different needs and demands (payment capacities). http://www.wsp.org/pdfs/eap_options_ppt.pdf

Safe handwashing

Soiled hands are an important source of transmitting diarrhoeas. There is ample proof that handwashing before preparing and eating food and after defecation and cleaning children's bottoms is an effective preventive habit (Boot & Cairncross, 1993). Benefits of safe handwashing habits are universal in all areas and with all groups, but children, and parents and siblings caring for young children are especially important groups. Handwashing is best done with soap and enough water for rinsing. However, if soap is not available or affordable, ashes, clean mud or local plants are also possible. If nothing better is available, firm rubbing and rinsing under a flow is the best alternative. For a poll on a recent partnership between the public health sector and the private sector (soap manufacturers) to promote handwashing with soap http://www.globalhandwashing.org/

Use of safe water sources

The scope and seriousness of health risks influences the need for campaigns on safe water uses. The (almost) eradication of guinea worm in Rajasthan, India and in West African countries is an example of effective programmes. It could be achieved by combining (1) protection of water sources, (2) massive education campaigns that combined mass approaches with interpersonal contacts, (3) treatment and (4) incidence monitoring (UNICEF, 1999).

A recent application is the promotion of safe water source use in arsenic contamination areas. The programme tests the water of each handpump, paints pumps with safe water

green and with contaminated water red and encourages users to use only green pumps for drinking water. This is harder than it seems because green pumps may be at a greater distance, in another neighbourhood and/or belong to another household or households. Sharing is further complicated by greater crowding, longer waiting, more wear and tear and more frequent breakdowns, and differences in class and castes.

Frequently washing of children's eyes

Skin and eye infections are especially common in arid areas. Both have health as well as socio-economic consequences. Washing more often can greatly reduce their spread. A restricting factor is that where water is scarce, using it frugally is a value, a norm and a habit. Young mothers who start washing their children's faces more often risk to be criticised by mothers-in-law, other women and husbands for 'wasting' water. A trachoma prevention programme in Tanzania used children's face washing competitions for mothers, mothers-in-laws and fathers to learn through practice that much less water was needed than thought. With one litre of water, mothers managed to wash 30-35 faces of children, fathers 12 (McCauley et al., 1990, 1992).

Social marketing for handwashing in Central America

A handwashing promotion programme in Guatemala found that parents saw clean children as more attractive and happier. Handwashing was considered good, but enabling factors were lacking. Soap, water and towels were scattered. Handwashing placed demands on mothers' scarce time and energy and the family's resources. Mothers were interested in hygiene education. They wanted short sessions and information materials in their own language and Spanish. Approval from fathers was crucial because they objected to higher water bills.

The project introduced a 'happy corner' for handwashing in the home and spread information to mothers on proper ways of washing hands. Fathers and children had own messages to reinforce the desired behaviours (Booth & Hurtado, 1992). In a second campaign, a catalyst (in this case a bilateral project) brought together the governments (which wanted to reduce diarrhoeas) with the private sector (the soap companies) in five countries. The campaign promoted proper practices (1:washing both hands 2:with soap 3:rubbing at least three times 4: dry with a clean towel) at critical times (1:before food preparation 2: before eating 3: after toilet use 4: after cleaning babies' bottoms).

Targeted were mothers in rural areas with low levels of education and socioeconomic status having children under five and primary schoolchildren from these families. Radio and television spots were the main media. In the evaluation, one in every three people could recall the campaign. This was less for rural and indigenous groups. In the before-after study in Guatemala, with an estimated outreach to 1,5 million children alone, the ability to mention all critical times and demonstrate the four proper practices increased by 10%., especially in urban areas. Again, a 'dedicated place' for handwashing supported good practice. Changes in the other countries were more modest (Saadé et al., 2001).

Appendix 9. Participatory tools and techniques

There are lots of participatory tools/techniques available to help guide the process. Three of the most popular approaches (overlapping rather than competing) are:

PHAST (Participatory Hygiene and Sanitation Transformation) developed in Eastern and Southern Africa in the mid-late 1990s and specifically focused on toolkits for programmes to bring about behavioural change in hygiene and sanitation.

SARAR (Self-esteem, Associative strength, Resourcefulness, Action planning, Responsibility) stimulates involvement in community-based activities of all kinds, not only by the more prestigious and articulate participants (such as community leaders or senior staff), but also by the less powerful, including non-literate community members.

PRA (Participatory Rural Appraisal) a generalized description which covers a wide range of techniques especially aimed at involving communities in decision-making and self-assessment and in the development of stakeholder partnerships.

Other useful tools or activities are:

A focus group discussion
A skilled facilitator assembles representative groups from the community and creates an atmosphere where individuals feel free to express opinions openly on topics such as the environmental problems caused by excreta and how they can be mitigated. The facilitator is armed with key questions, but the conclusions emerge from the groups' open discussions and lead to ideas for action. Focus groups are helpful in the formative research phase, identifying the target practices and key messages for the different groups.

A neighbourhood social map
In open meetings, local women and men have made a social map of their whole settlement (in small communities) or neighbourhood (in large communities). The techniques used depend on the levels of development. People draw in the soil, they fingerpaint or draw on paper, or use cut-and paste techniques. Techniques that require implements such as pens and scissors are less suitable for people without or with low literacy, often the women and the poor. Mapping can be used for many things, from what kind of families have and use what types of latrines, water sources or hygiene related skills to whether women and men from different classes and sections have equal access to education and training.

A transect walk
A local team of women and men systematically walks through a cross-section their settlement, reviews good and bad situations and note these in their cross-section diagram.

A household and/or school hygiene self-survey
A survey is planned and implemented by a team of local women and men inhabitants or parents, teachers and students helped by a local health or NGO worker.

Lists and tables (matrices)
Another technique is to list households which for example have and do not have certain improved water supply, sanitation or hygiene facilities. The number of households with and without facilities are then noted in a large table for all these facilities. Numbers may be written as figures, but non-literate or mixed groups usually use markings (e.g. tally marks), matchsticks, beans or pebbles. The table is sometimes adjusted for poverty (see Box). The group analysis the findings ("who are haves and have nots and why?"). They also make plans for improvements. They set priorities, decide on strategies, analyse human and financial recourses, make plans, list activities to implement the plans, identify women and men to carry out these activities, divide tasks, based on skills and workloads, make workplans and start implementation. For all these activities, other participatory tools/techniques are available.

All these approaches are based on a wealth of experiences in working with communities and households. There is a wide range of techniques that ensure involvement of groups who may otherwise be excluded, including, as just a few examples:

- PLA Notes, a periodical published by the International Institute for Environment and Development (IIED) has regular features about tools for PLA (Participatory Learning and Action) in a range of different situations. One issue is devoted to PLA in Community Water Management (http://www.irc.nl/page/1866)
- A very interesting specific example of a methodology for increasing awareness of hygiene issues in a participatory way is described in the Case Studies. Zimbabwe's "Health Clubs" give free courses on health and hygiene issues to anyone wishing to attend. They generate commitment and spread awareness of critical risks, resulting in measurable improvements in hygiene behaviours.
- The NORWASP project in Ghana uses a "Health and Hygiene Game" to stimulate awareness.
- IRC's Technical Paper 29 (Just Stir Gently, see References) includes a table (page 106) giving the pros and cons of different visual tools that can be prepared in advance for facilitating community group discussions.

Appendix 10. The PHAST approach

For more information, consult the following documents:

Participatory Hygiene and Sanitation Transformation: A new approach to working with communities, WHO/EOS/96.11
http://www.who.int/docstore/water_sanitation_health/Environmental_sanit/PHAST/phast96-11/96-11index.htm

Describes an exciting new approach, based on an innovative set of participatory techniques that has demonstrated its ability to promote hygienic behaviour, sanitation improvements, and community management of water and sanitation facilities. Known as the Participatory Hygiene and Sanitation Transformation, or PHAST, initiative, the approach was carefully developed and tested in both urban and rural areas of four African countries: Botswana, Kenya, Uganda, and Zimbabwe. Results of these tests indicate an unprecedented involvement of communities, the particular suitability of PHAST techniques to resource-poor settings, and remarkable success in terms of environmental and behavioural improvements.

PHAST Step-by-Step Guide: a participatory approach for the control of diarrhoeal disease. WHO, Geneva, 1998 (WHO/EOS/98.3)
by R. Sawyer, M. Simpson-Hébert, S. Wood
http://www.who.int/docstore/water_sanitation_health/Environmental_sanit/PHAST/phast96-11/96-11index.htm

Includes instructions for helping communities improve hygiene behaviour, prevent cholera and other diarrhoeal diseases, and manage their own water and sanitation facilities. Addressed to facilitators working in the community, the manual uses the Participatory Hygiene and Sanitation Transformation, or PHAST, approach, an exciting new methodology which relies on locally-prepared visual “toolkits” to stimulate community enthusiasm and participation. Recommended materials and activities were extensively field tested in four African countries.

Appendix 11. SARAR

http://www.who.int/docstore/water_sanitation_health/Environmental_sanit/PHAST/phast96-11/PHASTAnnexD.htm

SARAR is an education/training methodology for working with stakeholders at different levels to engage their creative capacities in planning, problem solving and evaluation. The acronym SARAR stands for the five attributes and capacities that are considered the minimum essentials for participation to be a dynamic and self-sustaining process:

Self-esteem: a sense of self-worth as a person as well as a valuable resource for development.

Associative strength: the capacity to define and work toward a common vision through mutual respect, trust, and collaborative effort.

Resourcefulness: the capacity to visualize new solutions to problems even against the odds, and the willingness to be challenged and take risks.

Action planning: combining critical thinking and creativity to come up with new, effective, and reality-based plans in which each participant has a useful and fulfilling role.

Responsibility: for follow-through until the commitments made are fully discharged and the hoped-for benefits achieved.

SARAR is based on the principle of fostering and strengthening these five attributes among the stakeholders involved in the evaluation. Such a process will enable the development of those people's own capacities for self-direction and management and will enhance the quality of participation among all of the stakeholders.

The various SARAR techniques can be grouped into five categories according to how they are most commonly used. While there is no set order in which these techniques are used, the five types of techniques are often applied progressively, having a cumulative effect.

Creative techniques involve the use of open-ended visual tools such as mapping and non-serial posters to encourage participants to break out of conventional ideas and routine ways of thinking

Investigative techniques such as pocket charts are designed to help participants do their own needs assessment by collecting and compiling data on problems and situations in their community

Analytical techniques including three pile sorting and gender analysis tools enable participants to prioritise problems and opportunities and to examine a problem in depth, allowing them to better understand its causes and identify alternative solutions.

Planning techniques are used to simplify the planning process so decisions can be made, not only by the more prestigious and articulate participants (such as community leaders or senior staff), but also by the less powerful, including non-literate community members. Planning techniques include story with a gap, force-field analysis and software-hardware exercise.

Informative techniques help gather information and use it for better decision-making. At the outset, participants are involved in using their creativity to look at situations in new ways and to build their capacity for self-expression. Then, they gain tools for investigating and analysing reality in more detail. Finally, they develop skills in gathering information, making decisions, and planning initiatives.

Less successful applications of SARAR have usually been traced to insufficient training of the SARAR facilitators. Without adequate preparation, facilitators will not feel comfortable experimenting with the different techniques, and may be more inclined to adopt a blueprint approach, that is, always using the same set of techniques in a predetermined way and not being responsive to the differences among communities or the various groups of stakeholders.

In other cases, problems have arisen when the use of SARAR techniques has been considered an end in itself, rather than a means to support the development and implementation of project activities. This problem can occur when SARAR activities are not linked to concrete follow-up activities. In such cases communities eventually see no benefit in being involved in the SARAR sessions and the whole process begins to break down.

The effectiveness of SARAR, like that of similar participatory techniques, can also be limited by a general resistance-usually by higher level managers and decision-makers rather than field workers or community members-to the use of qualitative, informal, and visual-based techniques. This can lead to problems if these sceptics obstruct the SARAR process by dismissing the results as unscientific or the participatory process itself as inefficient.

Appendix 12. Participatory Rural Appraisal (PRA)

Participatory Rural Appraisal (PRA) comprises a set of techniques aimed at shared learning between local people and outsiders. The term itself is misleading because more and more PRA is being used not only in rural settings, and not only for project appraisal, but throughout the project cycle, as well as for research studies. Indeed, the term PRA is one of many labels for similar participatory assessment approaches, the methodologies of which overlap considerably. It is probably more useful to consider the key principles behind PRA and its associated techniques, rather than the name per se, when assessing its appropriateness to a particular situation.
http://www.snvworld.org/cds/rgMRD/rural-development/rra-pra_1.htm

There are five key principles that form the basis of any PRA activity no matter what the objectives or setting:

1. Participation. PRA relies heavily on participation by the communities, as the method is designed to enable local people to be involved, not only as sources of information, but as partners with the PRA team in gathering and analysing the information.

2. Flexibility. The combination of techniques that is appropriate in a particular development context will be determined by such variables as the size and skill mix of the PRA team, the time and resources available, and the topic and location of the work.

3. Teamwork. Generally, a PRA is best conducted by a local team (speaking the local languages) with a few outsiders present, a significant representation of women, and a mix of sector specialists and social scientists, according to the topic.

4. Optimal ignorance. To be efficient in terms of both time and money, PRA work intends to gather just enough information to make the necessary recommendations and decisions.

5. Systematic. As PRA-generated data in their original form are seldom conducive to statistical analysis (given its largely qualitative nature and relatively small sample size), alternative ways have been developed to ensure the validity and reliability of the findings. These include sampling based on approximate stratification of the community by geographic location or relative wealth, and cross-checking, that is using a number of techniques to investigate views on a single topic (including through a final community meeting to discuss the findings and correct inconsistencies).

A new version of PRA comprises quantification of qualitative data so that at programme level, statistical analysis becomes possible. More useful websites can be found at
http://www.snvworld.org/cds/rgMRD/rural-development/rra-pra_1.htm

PRA makes use of a “basket of techniques” through which from which those most appropriate for the project context can be selected. The central part of any PRA is semi-structured interviewing (http://www.worldbank.org/poverty/impact/methods/semi-structured)

While sensitive topics are often better addressed in interviews with individuals, other topics of more general concern are amenable to focus group discussions and community meetings (http://www.worldbank.org/poverty/impact/methods/indgroup.htm#focusgroup).

During these interviews and discussions, several diagrammatic techniques are frequently used to stimulate debate and record the results. Many of these visuals are not drawn on paper but on the ground with sticks, stones, seeds, and other local materials, and then transferred to paper for a permanent record.Some of the key PRA diagrammatic techniques are:

- Mapping techniques (http://www.worldbank.org/poverty/impact/methods/mapping.htm)
- Ranking exercises (http://www.worldbank.org/poverty/impact/methods/ranking.htm)
- Trend analysis (http://www.worldbank.org/poverty/impact/methods/trend.htm)

Visual-based techniques are important tools for enhancing a shared understanding between outsiders and insiders, but may hide important differences of opinion and perspective when drawn in group settings, and may not reveal cultural-based information and beliefs adequately. They therefore need to be complemented by other techniques, such as careful interviewing and observation, to crosscheck and supplement the results of diagramming.

PRA involve some risks and limitations. Many of them are not unique to this method but are inherent in any research method that aims to investigate local conditions. One of the main problems is the risk of raising expectations. This may be impossible to avoid, but can be minimized with careful and repeated clarification of the purpose of the PRA and the role of the team in relation to the project, or government, at the start of every interview and meeting. Trying to use PRA as a standard survey to gather primarily quantitative data, using large sample sizes, and a questionnaire approach could greatly compromise the quality of the work and the insights produced. And, if the PRA team is not adequately trained in the methodology before the work begins, there is often a tendency to use too many different techniques, some of which are not relevant to the topic at hand. In general, when a training element is involved, there will be a trade-off between the long-term objective of building the capacity of the PRA team and getting good quality results in their first experience of using the methodology.

Furthermore, one common problem is that insufficient time is allowed for the team to relax with the local people, to listen to them, and to learn about the more sensitive issues under consideration. Rushing will also often mean missing the views of the poorest and least articulate members of the communities visited. The translation of PRA results into a standard evaluation report poses considerable challenges, and individuals unfamiliar with participatory research methods may raise questions about the credibility of the PRA findings.

A paper on common flaws in practicing PRA is online available at http://www.snvworld.org/cds/rgMRD/rural-development/rra-pra_1.htm

Appendix 13. Advocacy

To tackle the scourge of death and disease caused by poor hygiene, many partners have to be committed to hygiene promotion. Though it is behavioural change in families and communities that will make the difference, it has to be in many thousands of families, to have real impact. Therese Dooley put it well in her comments on the impressive integration of water, sanitation and hygiene in Zimbabwe (see case study chapter 6). She points out that the whole policy environment has to encompass hygiene education and promotion, so that it is "institutionalised" in government departments, local councils, NGOs and CBOs.

To achieve this, there has to be repeated advocacy, using all available messages and communication techniques. In the Zimbabwe example, Therese Dooley notes that the most powerful advocacy came from demonstration, both of the processes and the results. The training of multi-disciplinary teams at different levels resulted not just in operational cadres for hygiene promotion itself, but also in the spreading of conviction and commitment through the different agencies involved.

Interpersonal meetings are the most effective and participatory advocacy/communication tool, but with the limited availability of hygiene promoters in many countries the potential number of people reached is limited and further expansion is costly. Some of the other most common tools used in advocacy include:

- lobbying for influencing the policy process by working closely with key individuals in political and governmental structures;
- meetings, usually useful as part of a lobbying strategy
- negotiation, to reach a common position
- project visits, showing good practice.

Many advocacy initiatives involve the general public to influence policy makers. Tools for reaching them include:

- Newsletters
- E-mail/Internet
- Flyers
- Pamphlets
- Booklets
- Fact sheets
- Posters
- Video and drama
- Petitions
- Canvassing

In addition, the media (press, TV and radio) reach both the general public and contribute to the agenda setting of politicians as well as policy makers. Many of these tools overlap or are used in conjunction with each other.

About IRC

IRC facilitates the sharing, promotion and use of knowledge so that governments, professionals and organisations can better support poor men, women and children in developing countries to obtain water and sanitation services they will use and maintain. It does this by improving the information and knowledge base of the sector and by strengthening sector resource centres in the South.

As a gateway to quality information, the IRC maintains a Documentation Unit and a web site with a weekly news service, and produces publications in English, French, Spanish and Portuguese both in print and electronically. It also offers training and experience-based learning activities, advisory and evaluation services, applied research and learning projects in Asia, Africa and Latin America; and conducts advocacy activities for the sector as a whole. Topics include community management, gender and equity, institutional development, integrated water resources management, school sanitation, and hygiene promotion.

IRC staff work as facilitators in helping people make their own decisions; are equal partners with sector professionals from the South; stimulate dialogue among all parties to create trust and promote change; and create a learning environment to develop better alternatives.

IRC International Water and Sanitation Centre
P.O. Box 2869
2601 CW Delft
The Netherlands
Tel. +31 (0)15 219 29 39
Fax. +31 (0)15 219 09 55
E-mail: general@irc.nl
Internet http://www.irc.nl