

22 Journey towards changing behaviour: Evolution of hygiene education in Bangladesh

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Abstract

Historically, sanitation received a lower priority in Bangladesh than safe water supply until it was realised that progress was dependent upon considering sanitation and hygiene issues. First attempts to promote hygiene were conducted in a traditional way: by telling communities - especially women - what to do and trusting that behavioural change would follow. Largely it didn't. So hygiene education was changed to hygiene promotion and a series of methods evolved that were participatory in nature and designed to encourage sustainable hygiene behaviour change by the community. In this paper, these processes are detailed along with the major agencies involved.

Introduction

Bangladesh is a small country of 148,000 square kilometres. With a population of 150 million people (World Infozone, 2007), it has by some distance the highest population density of any country in the world¹ of more than 1,000 per square kilometre (Third World Institute, 2003). The leading causes of child death are related to diarrhoea, malnutrition, vaccine-preventable diseases and respiratory infections. Like other developing countries in Asia, a large section of the people is illiterate and uninformed about basic health and hygiene. For cultural reasons, most women – particularly in rural areas – are largely confined to their homes and neighbourhoods.

The perceptions and practices of hygiene are frequently related with cultural values and religious perspectives. Cultural and religious views of society often define the perception of hygiene with the ideas of 'purity' and 'pollution'. Purification is often required for religious activities like saying prayers and worship, rather than for living a healthy life. As a result, people – and especially children – suffer from chronic malnutrition and repeated

¹ Of all countries except city states or small island states

episodes of preventable diseases such as diarrhoea. Effective ways of promoting good hygiene are essential for reducing the high toll of sickness and death, their impacts on people's lives, and on the domestic and national economies.

However, while the progress made in the field of sanitation has received some attention in the literature, the changing methods used in hygiene promotion have been varied and have not always been fully documented. So, the purpose of this paper is to bring together the key attributes of different methods to allow a process of analysis of their various strengths and weaknesses to emerge through consideration and discussion.

The paper therefore focuses on descriptions of various hygiene promotion programmatic approaches. In each case the steps to carry out the work have been documented in some detail. The highlights of each main process used in Bangladesh are provided in the main body of text, with some commentary (but no hard evidence) on effectiveness. The details of participatory elements within the key processes are provided in Annexes 1 to 3. In a fourth Annex, some of the tools used in these participatory processes are highlighted.

The following hygiene promotion processes are set out in the remainder of this document:

- In Section 4: CARE's SAFER approach
- In Section 5: WaterAid Bangladesh's IPE Approach
- In Section 6: A summary of other approaches:
 - UNICEF's SHEWA-B
 - NGO Phulki's Child to Child method
 - NGO Forum's networking for scale
 - DPHE DANIDA's work
 - The Plan/Dhaka Ahsania Mission DISHARI approach,

- some commentary on the roles of other key actors, including the government's Department of Public Health Engineering (DPHE).

In the final section, some commentary and general observations are given on the status of current efforts in the sector. In this way, the paper provides a reference document of the basics of the main hygiene promotion processes used in the country in the last two decades, but also provides a degree of analysis and commentary on the processes employed and the stage that has been reached.

Hygiene education – a traditional teaching process

Since independence in 1971, the Government of Bangladesh (GoB) has been implementing water supply and sanitation programmes. Large scale, national level programmes are implemented by the DPHE within the Ministry of Local Government, Rural Development and Cooperatives (MLGRDC). Apart from these, public utility service agencies and NGOs also implement water and sanitation programmes.

The first DPHE national level project received support from UNICEF, with funds also coming from various donors, mainly from Denmark and Switzerland. In its early years, all efforts were on the provision of safe water through the installation of tubewells with handpumps. Latrine construction and hygiene education received less attention, so expected health benefits did not result. It was realised that provision of handpumps alone is not enough to meet the challenges. In the 1980s, the view emerged that safe water, safe excreta disposal and improved hygiene must go hand in hand, and therefore an integrated approach was developed in the mid-1980s. This included latrine construction and hygiene education, which aims to educate and make people aware that prevention of water and

excreta-related diseases is best achieved through the widespread adoption of safe hygiene practices.

So hygiene education is a comparatively new term, though it is part of health education, which is concerned with the prevention of disease related to water and sanitation (Boot, 1995). Health education is a widely used term in preventive medicine directed to promote healthy lifestyles. Historically, or traditionally, health professionals would define health education as a *one-way* approach – a sort of information dissemination. Like health education, hygiene education relied on the techniques of formal education under which most professionals have been trained. This model of education is basically a one-way, teacher dominated delivery system. In some cases, the approach used by the education worker to work with communities would not be based on the principles of community development, i.e. respect, dialogue and negotiation with community members. In this model, information is passed from the ‘expert’ to the ‘learner’ or ‘pupil’. This kind of approach has the comparative advantage that relatively few staff members are needed and it generally costs less time and money. The assumption was that people being told what they should do by hygiene educators will then proceed to follow those instructions, resulting in improved health for the individual.

This traditional method represents a generalised approach to promoting hygiene, which was designed for mass audience coverage. In other words, it is an approach, which uses the same educational material for all audiences despite cultural differences, or differences in norms or beliefs that may exist within Bangladesh. As is often the case, educational materials are pre-packaged and the information describing healthy behaviour is standardised. After a three-year

pilot phase, the integrated approach was reviewed in 1989 and it was found that general health messages do not work, even when they are disseminated through person to person (Boot, 1995).

One of the main problems with this model is that achievement is often reduced to meeting quantitative targets related to exposure to the message, or ability to recall facts. These targets indicate coverage (e.g. number of school children informed) but do not indicate the resulting behavioural changes. Field workers often cite the fact that many recipients of hygiene education in Bangladesh can recite the information they have received as proof of programme success, and there was an assumption that by having the information, individuals will then take steps to improve their health, but this generally didn’t happen (Jahan, 2006).

The fact that this sort of approach does not work in practice, has led practitioners in Bangladesh to seek to adopt more culturally aware, and more participatory methods of engaging with the community in hygiene awareness development. In a way, this process mirrors (and indeed is part of) the progress made in sanitation: the recognition of a need to move from supply-driven hardware provision to demand-driven hygiene promotion.

Social Mobilisation for Sanitation

The Government of Bangladesh, with assistance from UNICEF, launched a national programme in late-1992 called “Social Mobilisation for Sanitation (SOCMOB)” with the intent of using the dynamism of social mobilisation by involving people from various social strata in the efforts of promoting sanitation coverage (Ahmed and Mujibud Rahman, 2000). NGO Forum for Drinking Water Supply and

Sanitation implemented the project from April 1993 to March 1996 in three phases through its NGO partners in 20 diarrhoea-prone *thanas* (sub-districts) of five administrative divisions of Bangladesh. The project covered advocacy, social mobilisation and programme communication. Social mobilisation involves the creation of a social movement of a particular programme by mobilising all kinds of allies at national, regional and community level. Social mobilisation is the glue that binds advocacy activities to more plan- and behaviour-oriented communication activities (Boot, 1995). As a result of the SOCMOB project, latrine coverage increased up to 93% in intervention areas, about 60% were clean. Although the number of people washing their hands before eating and after defecation increased, the actual practice of washing hands remains unchanged. The message was clear, but little effort was given towards training on how to wash hand properly (Habitat International Coalition et al, 1998).

An innovative approach: CARE SAFER

The SAFER (Sanitation and Family Education Resource) approach, well known to many water and sanitation professionals, evolved over a period of ten years. CARE Bangladesh first started its water and sanitation work after a devastating cyclone in 1991 in Chittagong Division's coastal area. The Water, Sanitation and Hygiene (WASH) project focused primarily on provision of tubewells and latrines, and on rehabilitation of cyclone-damaged water or sanitation facilities. After learning from the WASH experience that people did not always make proper use of such facilities, CARE started SAFE (Sanitation and Family Education), a follow-on hygiene education project in the same region, in 1993. SAFE tested two models of community hygiene education for behaviour change: (1) “single-channel” and (2) “multi-channel” models.

In model 1, groups made up of hand tubewell caretakers, their spouses, and other users were the primary recipients of hygiene education. Model 2 used similar techniques, but with diverse populations, including children and all-male groups at tea stalls or markets. When it was proven during the SAFE period that the second model was the more effective of the two (Care, 2008), the SAFER programme (1995 to 2001) was based on the “multi-channel” approach. An experimental, process-oriented style with an unusual degree of flexibility has been given to achieve SAFE and SAFER objectives. Like SAFE, SAFER is designed as a “software-only” project, building demand for water and sanitation improvements but almost never providing any physical facilities, or “hardware.” These facilities were provided by other local sources.

The SAFER behaviour change model is distinctive in its simplicity, its emphasis on sanitation and diarrhoea prevention, and its communication style. There are three sections in the standard SAFER communication model: (1) sanitation and hygiene, (2) safe water, and (3) diarrhoea prevention and management. Each section includes a few clear and simple messages, presented visually in flash cards, in games, in pop-style songs, stories, or participatory action learning exercises.

In SAFER, community people are always actively engaged in their own learning process. They handle the materials and explain the messages in their own words. The SAFER communication technique minimises lecturing by the expert; and distinctive types of on-the-floor, semi-circular seating arrangements also encourage audience participation.

Community assessment through using PRA (Participatory Rural Appraisal) tools and techniques,

focus group discussion, key informant interviews, structured site observations, and other qualitative methods were used. These assessment methods were the basis of content development for problem identification, analysis and action planning as well as being used for monitoring and evaluation. The qualitative assessments allow community members and field workers to examine problems and define solutions that fit into existing community norms and practices (Hanchett et al., 2001).

BOX 1 Stories used in the SAFER programme

Two stories that are most popular and widely used are 'Fairies and Devils' and 'Bhulu-Pushi': each told with their own set of flash cards. They are detailed in Annex 1. Another story oriented to mothers is '*Brish: Kamon Ache*' ('How Is Brish?'). This is a gripping narrative of a marriage followed by an anxious period when the bride has trouble conceiving. After the birth of a much-wanted baby boy everyone is happy again, but the mother does not follow the recommended hygiene practices, and her baby gets diarrhoea and dies.

The model is based on recognition that each situation is different and requires methods that are appropriate to a particular community. The practical and sequential components of the model include the following:

- Discussions on establishing the links between behaviour change and personal benefits such as health benefits or financial savings
 - Acquisition of knowledge and skills through participation
 - Development of locally appropriate solutions through joint partnerships with the community taking into consideration the local values, beliefs and practices
 - Continuous adaptation of changes by the community
- Work on a series of small steps to behaviour change that are manageable, achievable and result in recognisable health benefits.

Using this approach, facilitators or field workers, serve as partners of community change rather than as teachers who impose pre-determined solutions. This method yields the best results when it employs the participation of those affected. The participatory technique is consistent with the elements underlying the concept of "critical health literacy" (Jahan, 2006). The essence of development is to empower people to take charge of their own health and to foster a spirit of self-reliance.

This cycle proved an effective way to understand current beliefs and to learn about how actual behaviours deviated from ideal ones. The result was an "incremental approach to improving hygiene behaviour," which differed in its simplicity from the prevailing intervention methods.

The range of SAFER hygiene behaviour change activities is aimed at promoting the sustained adoption of a full set of 13 basic behaviours that are most likely to prevent diarrhoea under Bangladeshi conditions:

1. Hygienic latrine (pit or water-seal) use by all family members;
2. Fixed-place defecation by young children (ages 3-5);
3. Safe disposal of children's faeces;
4. Keeping courtyard and other public areas clean, and free of faecal matter;
5. Six crucial times of hand washing (always with soap or ash): after defecation, before serving/cooking food, before feeding children, before eating, after cleaning an infant's bottom and after disposing of children's faeces;

6. Covering cooked food;
7. Drinking 'safe' (pathogen-free) water only;
8. Never priming the hand tubewell pump with pond water;
9. Domestic water management;
10. Keeping the water collection vessel clean;
11. Covering the water collection vessel when going to and from the tubewell;
12. Pouring water out of the drinking water vessel rather than dipping a cup into it;
13. Diarrhoea prevention and management: all the above practices, plus continuing breastfeeding and normal feeding during a child's diarrhoea episode and preparation of oral saline solution.

This basic set of hygiene practices is promoted in many different ways (See Annex 1). The main materials are as follows:

- The "flash card": an A4-size colour drawing laminated in plastic used as the basic material by all programmes;
- Transect walks with people to open defecation sites and discuss the bad smells and environmental pollution, especially pollution of water sources;

- A series of popular children's games ("Snakes and Ladders," or "*Ludtl!*") and stories (Box 1), all accompanied by visual materials;
- A wide assortment of locally available materials and processes to mimic the spread of faeces across living areas and compounds (see Annex 1).

As men seldom attended the sessions, the women suggested having separate sessions for them at their habitual meeting places. This proved to be an excellent way to help male members become aware of hygiene issues (Annex 1).

WaterAid Bangladesh: The IPE approach

The programme approach of WaterAid Bangladesh is known as IPEA-SWESHP, which stands for Integrated, Participatory and Empowering approaches to Safe Water, Environmental Sanitation and Hygiene Promotion (referred to here as the "IPE approach" for brevity). This combined learning and practices from the SAFER method described in the previous section and those from SARAR²

² SARAR is a participatory education and training method for working with stakeholders at different levels to use their creative capacity for problem solving and planning. The concept was developed in field based training of rural extension workers in Indonesia, India, and the Philippines in the early 1970s and in Latin America toward the end of the decade. The method has been used extensively in the development activities of various UN agencies, including UNDP and UNICEF, and by many NGOs to implement adult education, agriculture, water and sanitation and HIV AIDS programmes. The acronym SARAR stands for S - Self-esteem: a sense of self worth as a valuable resource for development; A - Associative strength: the capacity to define and work towards a common vision through mutual respect, trust and collaboration effort; R - Resourcefulness: the capacity to visualise a new solution to a problem against all odds, and the willingness to be challenged and take risks; A - 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; and R - Responsibility: for follow-through until the commitments made are fully discharged and hoped for benefits are achieved. It is used to (1) generate community awareness and commitment to address development problems; (2) engage stakeholders in planning, problem solving and evaluation (3) Build stakeholder capacity to assess, prioritise, create, plan, organise and evaluate development (4) empower people to take initiative and responsibility for decision making and (5) create awareness of and helping train staff in the use of participatory approaches. The method incorporates the participants' own life experiences, local perspectives, feelings, values and relevant social data in development projects and encourages innovative thinking. It also encourages participants to learn from local experience rather than from external experts. SARAR replaces 'top-down' approaches to development with a facilitation approach and help communities take more control over their own development by involving women and non-literate people in development planning and decision making.

and PHAST³. WaterAid Bangladesh (WAB) feels that IPEA-SWESHP offers a more flexible and effective approach than its predecessors such as SAFER, because it (1) integrates ‘hygiene behaviour change’ activities into a broader social development context, which engages the whole community to consider water, sanitation and hygiene as a common public health issue and (2) promotes the use of hardware facilities (water and sanitation) by all of the people at household and community level (bazaar, bus stop, school, etc).

The IPE approach is based on *three* principles:

- **Integration:** safe water supply, environmental sanitation and hygiene promotion are addressed simultaneously;
- **Participation:** The whole community, including the hardcore poor, are actively involved in project planning, implementation, monitoring and evaluation. Individuals in the community are trained to become trainers; the community determines the best water supply and sanitation infrastructure option and hygiene promotion education inputs are facilitated;
- **Empowerment:** People’s capacities, skills and indigenous knowledge are recognised and valued.

Support is provided in the form of capacity building to strengthen the ability of individuals who emerge as leaders to work as agents of change

within the community. Communities act as facilitating agents in their neighbouring areas. Empowered communities increase their confidence to analyse and voice their needs constructively to local government agencies or other development programmes.

The approach forms the basis of Community Led Total Sanitation (CLTS). Village Education Resource Centre (VERC), a rural partner of WaterAid, piloted the CLTS/ full sanitation approach in 1999-2000, following the key principles of the IPE Approach, in response to the poor impact of previous attempts to improve sanitation (Ahmed, 2006).

The CLTS approach is based on the assumption that, once the issues have been understood, communities have the commitment and ability to overcome their water and sanitation problems themselves. Field staff members assist communities in drawing up a behaviour-focused working definition of full sanitation (Box 2), through which communities come to recognise that in the area of water and sanitation, the behaviour of an individual has a direct impact on the health and wellbeing of others. Community mobilisation is triggered and the community plans and implements sustainable solutions that meet their own needs.

All partners of WaterAid Bangladesh use the IPE Approach in the rural and urban context as a ‘toolkit’ for implementation programme activities,

³ PHAST – Participatory (P) Hygiene (H) and (A) Sanitation (S) Transformation (T) “ is an innovative approach to promoting hygiene, sanitation and community management of water sanitation facilities. It is an adaptation of SARAR’s methodology of participatory learning. It allows communities to assess their condition on their own and to build confidence to undertake actions to improve their situations. It promotes health awareness and understanding which, in turn leads to environmental and behaviour improvements. The whole process is participatory, and the community develops their own plan of action to improve their sanitation conditions. It relies both on the training of extension workers and on the development of graphic materials. UNDP, World Bank- Regional Water and Sanitation group- East Africa and WHO jointly developed and tested this approach in Africa in 1993. A basic principle is the recognition and affirmation of people’s inborn abilities. The PHAST initiative puts these principles in to operation at community level in implementation of water, sanitation and hygiene education programmes.

BOX 2 CLTS: more than open defecation free communities

A working definition of full sanitation as defined and used in the VERC/WAB programme (VERC, 2002):

- No open defecation or open/hanging latrine use
- Effective hand washing after defecation and before eating / taking or handling food
- Food and water are covered
- Good personal hygienic practices, such as brushing teeth and trimming nails
- Latrines are well managed
- Sandals are worn when defecating
- Clean courtyards and roadsides
- Garbage is disposed of in a fixed place, such as a pit
- Safe water use for all domestic purposes
- Water points are well managed
- Waste water is disposed of down drains or in a fixed place
- No spitting in public places

while considering the context of their specific target communities, and following five main steps (see Annex 2 for details):

Step 1: Baseline information collection

Step 2: Problem identification and analysis

Step 3: Formation Action Committees and planning hygiene promotion intervention

Step 4: Promoting behavioural change

Step 5: Monitoring and evaluation including participatory monitoring by the community

Other approaches

UNICEF: SHEWA-B

UNICEF has been supporting water, sanitation programmes in Bangladesh since independence. From the mid-1980s onwards, it has included hygiene education as an integral part of its water and sanitation programme with the Government of Bangladesh. In January 2007, UNICEF and the

DPHE, on behalf of the Government of the People's Republic of Bangladesh, launched their new programme named "Sanitation, Hygiene Education and Water Supply Programme in Bangladesh (SHEWA-B)" with financial support from DFID to ensure adequate sanitation and safe water supply in un-served and under-served areas, particularly for the poorest and with a special focus on women and children. Hygiene education and community mobilisation are implemented by appointing local NGOs. UNICEF has already piloted the following process in some communities:

- **Community Hygiene Promoters:** The local NGO appoints Community Hygiene Promoters (CHP) for community mobilisation and hygiene promotion. Each CHP is responsible for a "Ward" (around two/three villages, maximum 500 households);

- **Participatory baseline:** Like CARE's SAFER and WaterAid Bangladesh's IPE approaches, at the beginning the community situation is analysed using PRA and other participatory tools and techniques to understand the present situation, e.g. through facilitating a transect walk with representatives of 20-50 households to assess the WATSAN situation of that area. During the transect walk the community people look for evidence of open defecation, hand washing practices, types and condition of latrines, types and condition of water sources (platform, drainage system), water collection practice and use of unsafe water (e.g. arsenic contaminated and pond water) for drinking, cooking and food preparation;

- **Review, social mapping and action planning:** After the transect walk the CHP assists the participants to think through the implications of poor hand washing, unsafe water options

and its use and open defecation, particularly the risks to their health, self respect, comfort, safety and privacy. After the transect walk the community people also draw a cluster/village/ward map with special focus on the hygiene, sanitation and water situation. After the community situation analysis, a Community Action Plan (CAP) is developed by the community mentioning its problems and how they will be solved. The CAP includes a timeframe and names of the people who will be responsible for specific tasks.

The CHP helps the group work, focusing on the following 11 behaviour changes:

1. No open defecation;
2. All household members older than five years, including poorest household members, use their own or shared latrines (one latrine for maximum two households);
3. All the latrine users use sandals in the latrine;
4. Faeces of children younger than five are disposed of in a hygienic latrine or buried in a hole;
5. Household members keep the latrine clean and make soap/ash and water available at or nearby the latrine;
6. Households in flood prone areas construct and use raised latrines;
7. Households reinstall latrine after flood, if necessary;
8. All members practicing hand washing with both hands and soap before preparing food, feeding children and eating and with soap or ash after defecation, cleaning baby's bottom;
9. All households always cover food;
10. Households keep their drinking water stored in a clean and covered container;
11. Use of safe water sources, such as a tubewell, ringwell, and rainwater for washing raw fruits and vegetables.

Each CHP visits each household once every two months to observe hygiene practices of households (good and bad) and maintains a book/record on observations, discussions on key hygiene practices (UNICEF, 2007). Based on the observations and discussions, the CHPs conduct hygiene promotion sessions with different local forums (details in Annex 3):

- Courtyard meetings;
- Facilitation sessions with men in tea stall/ grocery shops at ward level;
- Focus Group Discussions (FGD) on menstrual hygiene;
- Group meetings with working people, e.g. day labourers.

Phulki Child to Child

Phulki is a NGO that has been working since 1991. Phulki introduced the Child-to-Child (CTC) approach for hygiene education in Bangladesh. The assumption behind the approach is that children have the will, skill and motivation to learn and educate one another. A group of 10 children of 8-11 years of age are selected and trained on primary and preventive health care, e.g. nutrition, immunisation, personal hygiene, pure drinking water, use of watertight sanitary latrine, child rights and gender issues. Each of them is assigned the task to pass the learning on to 10 of his/her brothers/sisters or friends and also parents, neighbours. Thus, the messages of a better life are transmitted among these children in their own language, but in a direct way.

WaterAid Bangladesh has been providing financial support to Phulki since 1998 to implement a water, sanitation and hygiene promotion programme in the slums of Dhaka city through the CTC approach, to establish a resource and training centre for providing capacity building support to WAB's other partners to incorporate the CTC approach in their water sanitation programmes, and to scale up the approach in the sector.

The child leaders (a batch of 10 children) first receive training from field trainers on a particular topic and then they disseminate what they have learned among 100 children, parents and neighbours (10 each). After dissemination of the message(s), the child leaders also visit their friends' houses to ensure the practice of the new behaviour. Once per month the field trainers also sit with the friends/brothers/sisters of the child leaders and participate in the household visits. Now and then, the leaders organise a cultural programme (drama, songs) in the community to strengthen the promotion by the children. Occasionally, the child leaders and their friends observe community cleaning day (where all children participate to clean the community). Phulki developed different materials to train the child leaders and also use these materials to help child leaders to disseminate their learning among their friends/brothers and sisters as follows:

- **Flash cards** on personal hygiene (picture of dirty girls and boys and picture of clean girls and boys), garbage collection (how the slum children can collect garbage by taking safety measures), water pollution (how water is being polluted at source and also while carrying and preserving) purification of water (different cost effective ways of water

purification), causes of diarrhoea disease (picture and description of all different causes) and treatment (making saline);

- **Games** (Ludo, Charki);
- **Rhymes**;
- **Scripts** for drama;
- **Stories** for role-plays.

NGO Forum for Drinking Water Supply and Sanitation

The NGO Forum for Drinking Water Supply and Sanitation (NGOF) has been working in Bangladesh since 1982 to ensure the basic needs of safe potable water, sound sanitation practices and maintenance of personal hygiene for the distressed population. Their mission is to initiate a radical change in the depressing water supply and sanitation situation in the most densely populated country in the world. NGO Forum is a networking organisation. They themselves don't implement programmes; rather, they coordinate more than 600 local non-governmental organisations. NGOF developed many materials for hygiene promotion, such as:

- **Flip charts** (e.g. on the use and proper maintenance of latrines);
- **Posters** (e.g. on hand washing, effects of open defecation, disease transmission routes);
- **Leaflets** (e.g. how to construct different types of hygienic latrines, use and maintenance of the water seal, ways of a healthy life);
- **Flash cards** (e.g. on personal hygiene, menstrual hygiene);
- **Booklets** for school sanitation programmes, training manual and guidelines to orient local government representatives and religious leaders;

- **Rhymes, stories and a video** on arsenic contamination of drinking water.

The Forum provides training support to field workers of NGOs (mainly small and medium size NGOs) on how to facilitate hygiene promotion sessions using different materials. Any organisation can purchase their materials and can also receive training from them.

NGO Forum's partners mainly facilitate regular sessions on sanitation and hygiene in women's groups through courtyard meetings (using flash cards, leaflet and flip charts), men's groups through tea stall sessions (using posters and leaflets) and children groups through the Child-to-Child approach. With the collaboration of partners they also organise periodic rallies, seminars and local training programmes for mass coverage, mainly using leaflets and posters. NGO Forum also broadcasts programmes on TV and radio.

DPHE-DANIDA Water Supply and Sanitation Project

An intensive hygiene promotion programme is undertaken under the DPHE-DANIDA Water Supply and Sanitation Project. It is conducted through household visits, courtyard meetings, community meetings, school and tea stall sessions, video shows, popular theatre shows, children's rallies, miking (rally with messages and slogans spread through a (hand) loudspeaker, International Health Day campaigns, etc. by the staff of partner NGOs. Different kinds of IEC (Information, Education, Communication) materials are distributed for mass dissemination of standard messages, on, for example, *ludu*, *pussles*, stickers, pocket notebook, calendars, poster and display boards.

DISHARI

The Decentralised Total Sanitation Project (DISHARI) of the Dhaka Ahsania Mission (DAM) started in March 2004, with funding from Plan Bangladesh, WaterAid Bangladesh, and the Water and Sanitation Programme (WSP) of the World Bank. The aim is to develop an **Upazilla-based total sanitation model** steered by the local government (Union Parishad) and with the participation of local departments of the government, NGOs and communities. DISHARI is implemented along the lines of the CLTS approach. The NGO first organised and facilitated a five-day residential workshop with local government representatives to motivate them and build their capacity for pursuing full sanitation in their community. Then, with the active participation of the local government representatives, the NGO's facilitators organise and motivate the community people and help them to form action committees in different tiers:

- a *Union Task Force* at Union level (the lowest level of local government, covering about 10 to 15 villages with around 4000 households);
- a *Ward Task Force* covering around ten *paras* (clusters/hamlets); a union consists of nine wards;
- a *Para Action Committee* in each Para (cluster/hamlet) which represents some 50-80 families.

Seven to ten men, women and adolescent boys and girls are the members of the Para Action Committees. These committees mainly take the leading role in improving hygiene practices in their own community. Instead of facilitating regular courtyard sessions with different groups, the members of the Para Action Committee (often in the presence of the DISHARI worker or local

government representatives) gather people of the cluster and discuss one particular issue, using PRA and other participatory techniques such as:

- **Body mapping:** In a drawing of a human body, villagers mark different body parts with symbols for the various diseases, including those related to sanitation, hygiene and water that affects these parts;
- **Latrine or water source visits:** First, the group visits three to four latrines or water sources for structured and unstructured *observations*; then the members discuss the *good and bad practices* from their observations, identify the behaviour required to change, and develop the *action plan* for behavioural change, mentioning the timeframe and responsibilities
- **Participatory monitoring:** After two to four weeks, the Action Committee repeats the same activities to review progress and plan/encourage further action;
- **Food hygiene:** In a plate of food (any kind of snack) the facilitator (who may be one of the trained community members) mixes a hair, a leg of a fly, a dead mosquito or a drop of spit with the food and offers the plate to the others to eat. When the people refuse to eat the dirty food, the facilitator initiates a discussion on how they are eating these types of dirty food (even worse than these) without knowing. The participants identify the causes and effect of their present practices and develop an action plan for change;
- **Hand washing:** Soap, a jug of water and two bowls are used as material. The facilitator invites a person (mainly children) to wash their hands first with only water in one bowl and the second time to wash their hands with soap and water in another bowl. Then the facilitator asks if he or she can drink the dirty

water of the second bowl. When a negative response is given, the facilitator initiates the discussion on how every day we are eating the dirt that has come off the hands washed with soap along with our food, to create a commitment for the improved practice. In Bangladesh, people generally wash their hands with only water before eating food;

- **Drama, role-play and demonstrations** of bad and good behaviours performed by the community people themselves, and showing the impact on people's health and livelihoods.

As DAM is the partner of WaterAid Bangladesh, it sometimes uses also the tools and techniques from the WAB hygiene promotion guidebook.

Para Action Committee members work voluntarily without remuneration. They are trained under DISHARI to facilitate hygiene promotion activities and sessions with groups of fellow villagers. In the preliminary stage, DISHARI workers help them by facilitating through demonstrations. The local government representatives are also aware of good and bad hygiene and sanitation, and support the participatory activities and local action plans through community visits and speeches in different community meetings.

Department of Public Health and Engineering (DPHE)

DPHE is the national lead agency for water supply and sanitation, facilitating both the rural and urban sub-sectors. Most of the senior staff members of DPHE have a technical (civil engineering) background. In the donor-funded project of DPHE, the hygiene promotion part is being implemented

by appointing NGOs. Training of these NGOs is being provided by recruiting other NGOs or at a private training institute. DPHE's training division mainly designs and coordinates those parts of the training programme that focus on issues related to technology and financial management. DPHE staff themselves have recognised that with access to physical facilities communities need to be aware of hygiene through hygiene promotion. But DPHE does not have any staff in the training division with the expertise required to recruit capable NGOs for training on and implementation support to community hygiene promotion. Recently, and with the financial support of the DPHE-UNICEF project, DPHE recruited a small number of staff in a separate division with a background in social development, but they are comparatively junior in position.

Other sector actors

The *Bangladesh Rural Advancement Committee* (BRAC) is the largest NGO in Bangladesh. It recently received funds from the Dutch government to implement a large-scale water and sanitation programme. BRAC is a well-reported organisation for the capacity building of NGO professionals in the areas of micro finance, informal education, primary health care, etc. However, its experiences with the implementation of integrated water, sanitation and hygiene education programmes is limited. BRAC is comparatively new to the area of hygiene promotion and its intervention is still in the design phase. Given its developmental experience, however, it is expected that BRAC's engagement will add value in the near future.

Plan Bangladesh provides financial support to different NGOs for implementation of the integrated water, sanitation and hygiene promotion

programme. But Plan Bangladesh did not develop any hygiene promotion activities and also does not provide training support on hygiene education to its partners.

Conclusions

Shift to hygiene promotion: In Bangladesh, most of the key actors in the water and sanitation sector now use the term “hygiene promotion,” which emphasises overall behaviour change instead of “hygiene education,” which focuses on disseminating information about new/improved behaviours. In the CLTS approach, safe sanitation, water supply and hygiene are being looked at from the point of view of promoting a wide range of safe practices, which is wider than facilitation of hygiene education sessions on some key behaviour.

Shared learning through partnerships and training: The original CLTS approach goes beyond ending open defecation and also gives more emphasis on empowering the community to understand the effects of unhygienic behaviour and building commitment and skills to gradually shift the whole community towards the whole range of hygienic practices. After CARE SAFER and the CLTS experience of WaterAid Bangladesh and VERC, and also after WAB's urban partners' experience in implementation of an integrated programme in slums, most of the sector actors have now developed or reviewed their programme from the experience of these two innovations, either through direct partnership or by receiving capacity building support.

CARE SAFER, for example, had a partnership with the WATSAN Partnership Project (funded by SDC) and UNICEF. WaterAid Bangladesh supported its 27 partner NGOs, including NGO Forum, Phulki and

Dishari and also provided training support to World Vision Bangladesh, DPHE-DANIDA Coastal Belt project, DPHE-WHO project, ICDDR, TDH-Italy and Local Partnerships for Urban Poverty Alleviation UNDP/UN-Habitat/LGED/Project.

Hygiene promotion programmes in different sector agencies: At present, UNICEF (in partnership with DPHE and NGOs), WaterAid Bangladesh (in partnership with local NGOs), DANIDA Coastal Belt Project (in partnership with DPHE, NGOs), BRAC and NGO Forum are implementing major water and sanitation programmes in Bangladesh with a special focus on hygiene promotion. Most of the actors have developed their own materials, which follow participatory processes and have similarities. Generally the renowned organisations in Bangladesh don't want to implement a programme following another organisation's approach and materials. To enrich the approach, the main stakeholders coordinate among themselves and contribute to each other's programme. They even

sometimes receive capacity building support from each other. But after receiving training/orientation from expert organisations, most of the time the recipient organisations blend the approaches with their own approach, rather than following it exactly. There are even examples of redesigning materials on the same topics with minor changes.

Time for assessments of costs and effectiveness:

Due to the above reasons, a good number of approaches and materials have been developed for hygiene promotion in the last ten years and are available in the sector. Therefore, it is now a good time for the programmes to see how effectively the interventions have changed behaviours and created community capacities for sustained action, how well improved behaviours are sustained and new issues taken up, and at which costs these outcomes are being achieved. This will enable us to show what progress has so far been made and where further improvements are possible.

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Annex 1 Participatory Methods in SAFER

The various types of participatory extension methods used by SAFER are as follows (Jahan, 2006):

- **Courtyard sessions** These are participatory and lively small group discussion sessions mainly using flash cards facilitated by field workers with mostly 15 to 25 women, although men are also invited to attend. Participatory learning techniques and other interactive training methods are used. Participants themselves shared their experience. At the end of each session, participants describe what they would do differently to improve their hygiene behaviour and overall community health;
- **Child-to-child communication sessions** Field workers conduct sessions to encourage children to play interactive games that incorporate the links between good hygiene behaviours and improved health. The programme is based on indigenous games, poems, stories identified from within the community and adapted to serve an educational purpose. The children recite rhymes and play games with hygiene/health messages. They are the main artists in role-play. Child leaders monitor the hygiene practice in their own family and also at their friends and neighbours;
- **Tea stall sessions** Men play an important role in decision-making in Bangladesh. For example, they are responsible for the decisions to purchase and install hardware (latrines and tubewells). They also exercise considerable influence on the shaping of society norms, which affect the freedom of movement of field workers and the opportunities for women to gather in a place and discuss hygiene behaviour. Although courtyard

sessions were meant for women and men, in practice only two or three men tended to attend. The sessions were being conducted during the day when men were busy working. Even the few men who did come lost interest, assuming that these sessions were really only for women and the men themselves did not need any health education. At this point, the community members suggested that hygiene sessions should be conducted at public places like teashops and clubs where men gather when they are not working. This was a highly successful initiative to reach male community members and help them see the relationships between expected hygiene practices and good health.

- **Sessions with key opinion/community leaders** For wider dissemination of information, key opinion leaders were identified by community members through focus group discussions and community mapping. This was done by using the most common Participatory Rural Appraisal (PRA) methods of Robert Chambers and others. Community members identified key opinion leaders as those people in the community to whom they turned to for advice and guidance but were not necessarily official leaders. This group included teashop owners, school teachers, hawkers (travelling sales-women and men), village doctors and volunteer social workers. These key opinion leaders were not expected to be outreach workers but rather people to turn to for sound information and meaningful advice.

The basic messages are communicated in many different ways. The main materials are as follows:

- **Flash cards.** The “flash card”, an A4-size colour drawing laminated in plastic is the

basic material used by all programmes. The artwork is field-tested before being finalised, to ensure acceptability to audiences. Different sets of flash cards are used for different populations. Many developed during the SAFE project are still in use; others were developed by SAFER. In addition to flash cards, the SAFE and SAFER projects have developed an inventory of popular children's games ("Snakes and Ladders," or "*Ludtl*") and stories, all accompanied by visual materials. Two stories that are most popular and widely used are 'Fairies and Devils' and 'Bhulu-Pushi', each with its own set of flash cards (Hanchett et al., 2001);

- **Stories and role-play.** In the 'Fairies and Devils' story, children are praised by an angelic 'fairy' when they do the right things: using hygienic latrines, washing hands with soap after defecation and before eating, encouraging very young siblings to use fixed places for defecation, and so on. They are threatened by a scary devil, however, when they defecate in a courtyard, wash their bottoms in a household pond, eat without washing their hands, or prime a hand tubewell pump with pond water;
- 'Bhulu-Pushi' is the story of a dog (Bhulu) having all the wrong habits and a cat (Pushi) having all the right ones. Children act out these characters in role-play sessions, dramatically emphasising the final scenes in which the dog is attacked with severe diarrhoea.
- Another story oriented to mothers is '*Brisht; Kamon Ache*' ('How Is Brisht?'). This is a gripping narrative of a marriage followed by an anxious period when the bride has trouble conceiving. After the birth of a much-wanted baby boy everyone is happy again, but the

mother does not follow the recommended hygiene practices, and her baby gets diarrhoea and dies. This story is universally considered to be very moving, and staff and villagers often cry when heard it is told (Hanchett et al., 2001);

- **Small model:** A simple model of a village, complete with water flowing between hanging latrines, canals, ponds, and tubewells, is used to start off discussions in all male tea stall sessions (Hanchett et al., 2001);
- **Locally available materials:** Other communication devices use a wide assortment of locally available materials such as rocks, dishes, sand, water, and colour, coloured mud, or courtyard floors spread with turmeric (the yellow turmeric represents human faeces). When a skipping rope is distributed to people or when they are asked to move a toy chicken or dog around the coloured mud or floors spread with turmeric, they begin to see how faeces can spread;
- **Transect walk:** Taking people to open defecation sites and discussing the negative effects such as bad smells and environmental pollution is also a persuasive sanitation promotion technique.

Behaviour based monitoring system

Field Trainers use checklists to conduct daily checks (through observations and interviews) on local impact indicators (Hanchett et al., 2001). Field staff and Field Trainers use questionnaires to conduct full sample surveys of working area households every six months. This activity is carried out by staff other than those who do the work. Field staff and Field Trainers conduct the surveys in each other's areas. Household monitoring is done only

in households including children younger than five. Information on knowledge and personal hygiene behaviour (such as hand washing) is based on reported practices, not on direct observations.

Adolescent groups are formed and trained. Adolescent monitors (aged between 10 to 19) assist in the six-monthly survey by doing checklist-guided observations in some of the same households covered by surveys. This was an experimental monitoring activity in model sites only. There are differences between the adolescents' behavioural counts and those of official monitors. It is not known whether these differences result from the different techniques used by adolescents and others, or whether they result from adolescents' less developed observational skills. The adolescents just observe; they do not ask any direct questions. They observe whether people use latrines or not, whether they wash hands with

soap, whether children use "fixed place" or not - whether ash or soap is used after defecation and whether children defecate here and there. They observe both male and female behaviour.

Each six-monthly monitoring survey follows the completion of one community hygiene education cycle. The cycle, as mentioned, consists of sections on (1) sanitation and hygiene, (2) safe water, and (3) diarrhoea prevention and management, with two months given to each. Then the six-monthly monitoring is conducted, with data analysed as soon as possible by hand, and then with computers. Once the data has been analysed, simple pictorial charts are prepared for presentation to people in each working area. These charts show in clear terms the progress so far toward reaching local behaviour-change goals. They are presented in various ways to people in the working areas: in Union Parishad council or committee meetings.

Annex 2 Detailed participatory steps in IPEA SWESHP

Steps 1 and 2: Baseline information collection, problem identification and analysis

The purpose of collecting baseline information is three-fold:

- To identify good local hygiene behaviour which need to be supported and built on;
 - To identify the risk or problematic hygiene behaviour that actually exists;
 - To use this information to determine those areas which hygiene education efforts need be focus on.
- sanitary conditions (number of hygienic and unhygienic latrines, open defecation areas);
 - house premises with special focus on garbage and waste water disposal and management;
 - ways and means of disposal of animal wastes;
 - general village activities –general daily work/ routine, etc.;
 - public facilities such as schools, shops, health centre, market and religious places;
 - Water and sanitation facilities in schools, markets and religious places.

Mainly PRA tools are being used to get the 'baseline' information as follows:

- Health/transect walk;
- Social/village mapping;
- Wealth ranking;
- Focus group discussion;
- Venn diagram.

Health /transect walk

Prior to the baseline, the facilitators introduce the project/organisation including the objective of their involvement with the community and also build friendly relations (rapport building) with the community people. After rapport building, the facilitator requests the villagers to gather in one particular place for a health walk. The facilitators must ensure the participation of all categories of people (poor, non poor, men, women, adolescent, children) in the health walk. The community people walk with in village surroundings and observe following:

- water sources of village (safe, unsafe, functional, non-functional, location)

Social /village cluster map

After the transect walk the participants transfer their observation into a village map. The process is as follows:

- First mark the location of the village in the ground/a big brown paper;
- First mark one main thing of the village (e.g. main road connecting the village/school/ religious place and then the village roads/ river located within the village. All the houses and their types (made in brick/C-sheet/ bamboo/leaves, for different types , different marking signs/colour pens are used);
- Local infrastructure such as school, post office, health centre, religious places, local government office (can be marked by given appropriate symbols or using different colours), etc.
- The various drinking water sources; their location, status (functioning or non- functioning) including waste water disposal;
- Houses having latrines (mark hygienic or unhygienic using different symbol and colour) and whether they are used;

- Mark houses without latrine;
- Location of community latrine and their use (if any);
- Areas used for open defecation – indicating the areas used by men, women, children separately;
- The houses indicated in the map are to be numbered;
- The number of members in each house are to be indicated (number of adults and children: male and female).

Faeces calculation

The community calculates the amount of faeces that pile up in the community every day due to open defecation, then estimate the total amount per week, month, year, etc.

Cause-effect analysis

The facilitator helps the community draw a diagram to analyse the effects of bad hygiene behaviour by seeing how the faeces/germs enter our body and cause disease.

Body mapping

The community people (preferably)/facilitator draw a human body on a poster paper for acquiring information on common diseases in a particular community. On the different organs (e.g. hand, leg, mouth, etc.) the community people draw the symbols for different common diseases and analyse the cause of these diseases and ways to overcome them.

Seasonality trend analysis

The community analyses the availability/crisis of safe water in different seasons and the effects of

using unsafe water in particular seasons (dry season, rainy season, during floods) also the trend of diseases in the different seasons.

Economic categorisation/wealth ranking

The participants categorised all households as *rich relatively well off, middle class, lower middleclass poor, or hardcore/extreme poor* using simple agreed indicators (not only financial, but also family size/composition, living conditions, health status etc.) and mark houses according to these categorisations with a different colour or symbol in the map, so as to understand individual household's capacities to spend/contribute to water and sanitation, identify the poor and extreme poor households to ensure any service provision "first" for them, and also give special priority to their inclusion in the community-based organisation. This exercise also helps to mobilize resources from rich and middle class families to the poor and ultra poor. Common indicators used for categorisation include (but are not necessarily limited to) type of occupation; income; tenancy; household assets (TV and freezer, land, schooling, etc); purchasing capacity for rice, meat, fish, and vegetables; number of meals taken per day, marital status, health status, etc.

Internal/external relationships

Community members also analysed their relations with the different service delivery organisations by drawing Venn diagrams. Venn diagrams have been drawn separately for the following aspects:

- People representing the village by a symbol or a marking;
- The institutions that the people feel are important; according to their importance they make the circle bigger or smaller;

- Then people show the accessibility of these important institutions by keeping these circles nearer or further away from the village according to their accessibility.

Step 3: Formation action committees and planning hygiene promotion intervention

After all the exercises, the community people present their findings in the larger community group. After the presentation, they reach the agreement that they themselves will take action to overcome the situation. Usually a Watsan/village/slum development committee is been formed. After formation of the committee a Community Action Plan is developed which mainly incorporate the following:

- Blocking the spread of diseases by installation/repair/upgrade of cost effective, environment and user-friendly latrine and water options;
- Promotion of improved hygiene behaviour.

The CAP includes the timeframe and name of the people/sub group who will be responsible for specific tasks. Different sub-committees/groups are being formed such as women groups, children groups, adolescent groups, engineering group.

Step 4: Promoting the behavioural change

The promotional activities during baseline information collection, problem identification and analysis (step 1 and 2) using different participatory tools and techniques, ignite community people to change and practice hygienic behaviour. The success of the whole approach depends on the promotion of improved hygienic behaviour during step 1 and 2. As proof of the change, the community creates safe sanitation and water facilities and simultaneously take action for improved personal

hygiene, which is the paradigm shift from the traditional hygiene education method to promotion of improved practices. For a continuation of community people's enthusiasm, and to develop an in-depth understanding on different hygiene behaviour-related issues, WaterAid Bangladesh partner NGOs facilitate hygiene promotion activities for two years on personal hygiene practices, family hygiene and also community hygiene on the following issues:

Personal hygiene

Hand washing with cleansing agent (ash or soap) before/after

- defecation
- eating
- handling food
- feeding young children
- handling children's faeces and washing bottom

Sanitation

- use of hygienic latrine
- using sandals in latrine

Personal hygiene

- cutting nails and keeping them clean
- wearing clean clothes
- taking baths regularly

Menstrual hygiene

- menstruation is a normal phenomenon of growing up
- using clean material
- changing material as frequently as necessary
- washing the material so it stays clean
- drying it in sunlight
- storing it after proper drying in a clean and safe place for future use

- bathing and keeping clean
- eating nutritious food
- carrying out normal activities as much as possible
- no need for any social exclusion

Food hygiene

- avoiding eating stale or rotten food

Family hygiene

Safe water use

- safe sources of water
- using safe water from safe source for drinking, and cleaning mouth and dishes
- keeping water pots covered during transfer and preservation

Sanitation

- use of hygienic latrine by all members of the family
- regular maintenance of latrines
- disposal of young children's faeces in the latrine

Food hygiene

- keeping all raw and cooked food covered
- not eating any raw food (fruits, uncooked vegetables) without washing with safe water
- keeping food safe from the reach of pets/household animals; on a raised place [stoop/hanger/rack or shelves]

Environmental sanitation

Solid wastes:

- safe disposal of household refuse in a specified place
- dumping organic waste together to produce fertiliser

- household animals to be kept in a specified place, if possible a little away from the house
- keeping home surrounds clean and free from bushes to have more sunlight in the house

Liquid wastes:

- waste water must not accumulate near (within six feet of) the water source
- waste water can be used for rearing vegetable gardens/fish
- part of the water used maybe used for recharging the water table through use of soak pits

Community hygiene

- protecting community surface water sources from getting contaminated (allowing only cleaning of dishes, washing and bathing of people)
- preventing animals entry or washing in the water source
- preventing erection of hanging latrines beside the water sources
- encouraging use of appropriate/alternative water source in arsenic-prone areas

Arsenic contamination

- a toxic element found in shallow underground aquifer
- causes many harmful diseases
- remedy: prevent by avoiding the drinking of arsenic contaminated water

Personnel

Field workers (a field workers is responsible for two to three villages) with the support of

community volunteers (WaterAid partners recruit volunteers in each community) mobilize the community and facilitate the sessions. Field workers are mainly simple graduates (14th class) and volunteers have seventh to ninth grade education. Field workers receive more than two weeks training and community volunteers receive three to five days training. In most NGOs the community volunteers are part-time paid workers.

Duration

Hygiene promotion lasts for two years and the key topics are discussed in monthly sessions with the help of participatory methods and material in the first six to nine months. Simultaneously, the field workers and CVs visit the households and community places to provide follow-up and mentoring support for behavioural change. This continues for two years and the field workers maintain records of their observation. The frequency and number of sessions are flexible.

Participants

WaterAid's partners and trained community members facilitate hygiene promotion activities among different groups of people using different channels, as follows:

- Female groups (usually a group consists of 20 women); mainly courtyard sessions using flash cards and other local materials;
- Adolescent girls group; courtyard sessions, household-based discussion, focus group discussion using flash cards, poster leaflet and other local materials;
- Children group (school/community-based); discussion session using flash cards and poster, debate, drawing, role play, rally, rhymes, storybooks;
- Male groups: community-based evening session/courtyard meeting, tea stall session, market based session/discussion, focus group discussion using flash cards, poster leaflet and other local materials;
- Apart from the above-mentioned activities, the partners also organise rally, workshop, seminar, and fair, and other cultural activities to raise awareness among people including local government representatives, teachers, and religious leaders.

Materials

In addition to local materials such as real live objects (eg bowl, water and soap, storage pots and different types of dippers) and village materials for PRA, WaterAid has developed 50 flash cards on:

- hand washing;
- sanitation ladder (pictures of unhygienic latrines and also different model of hygienic latrine);
- diagram of faecal oral contamination;
- examples of hygienic and unhygienic environment (picture of unhygienic community and another picture of hygienic community);
- solid and liquid waste disposal;
- menstrual hygiene (picture on washing the used rag by soap, drying under sunlight, storing in a clean and safe place for future use, disposal of sanitary napkin);
- division of labour to reduce women and girls' workload and involve men and boys in Watsan related work (picture of current practice, women and girls carrying the water, cleaning the latrine, washing the cooking utensils and cleaning the children bottom and also picture on same topic where both men, women, boys and girls are sharing the responsibilities);

- water safety (from source to consumption).

Apart from flash cards, storybooks, rhymes, poster, leaflet, songs, quiz, games and documentary films have been developed. For the demonstration of hand washing a bowl, soap, a jug of water is used. In menstrual hygiene sessions a doll, a piece of cloth, and a homemade sanitary napkin (cotton wool folded inside a clean piece of cloth, adolescent girls can make sanitary napkin to use at school by using cotton wool that is available in the local market at a reasonable price).

Step 5: Monitoring and evaluation

Community-based participatory monitoring plays a vital role in the ASEH working area to increase community involvement in the changing process of their hygiene behaviour. The community is responsible for planning and implementation of actions for behavioural change. The field workers only support them for implementation community plans. So the community themselves monitor the change, a process called 'participatory monitoring'. During preparation of the action plan to implement Watsan-related hardware and software activities, the CBOs select monitoring groups to monitor the implementation of ongoing activities as well as health- and hygiene-related practices.

The monitoring groups monitor the hygienic practices through observation and dialogue at household level and then document it on a monitoring sheet. Usually, this is done on a large sheet of brown paper with a picture of key hygiene behaviour and a table for marking the practice status of different families. For recording the information community people

generally used symbols such as “” or “X” (one for 'yes' and one for 'no'), which make the system user-friendly (even illiterate people can keep the record) and time convenient. In the monthly meeting the CBOs review all followed-up activities that were monitored by monitoring groups. Normally one person (mainly women) in each monitoring group takes responsibility for monitoring 10 to 12 neighbouring households.

The field workers also visit households to monitor the change and verify the result of community monitoring.

Apart from field workers the senior staff members of partner organisations and WAB also visit the community in every quarter to monitor the progress.

Evaluation is also carried out by appointing an external agency, mainly to identify the success, learning and challenges.

Alternative:

Ask participants to think up other group activities for those that arrive at one of the four squares, including an activity that has to do with sanitation or hygiene.

Story with a gap

Objectives: (1) To assist the community in planning and involve individuals in a critical analysis of their own situation (2) To encourage goal setting and ultimately behaviour change.

Time: 1 hour

Tool: Two large formats laminated illustration showing the same community before and often improvement in water supply, sanitation and hygiene

Process:

Step 1:

Introduce the exercise to the participants.

Step 2:

Show them the picture of the before scene and ask them to describe what they see. Then show them the after scene and ask them again to describe what they see. Ask them to identify poor hygiene, sanitation and water use practices in the first picture. Point out any they have missed, and clarify any misconceptions they have.

Step 3:

In groups, ask participants to create a story from their own experiences as to what happened between the two pictures.

Step 4:

Report back on the story and discuss the problem using the discussion points below:

- Do these stories relate to current events in this community?
- What has caused the problems in the first picture?
- What do you think this slum/village did to solve its problem?
- Does your community have any of these problems?
- What steps are necessary? What steps are necessary at household level? At community level?

Annex 3 Details of UNICEF SHEWA-B approach

The CHP carries out the following activities for hygiene promotion⁴:

Household visits

Each CHP cover around 500 households and visit each household bi-monthly (once every two months). They observe hygiene practices of households (good and bad) and maintain a logbook/record on observations and discussions on key hygiene practices. Observation areas are:

- Dispose of children's excreta
- Cleanliness of latrines, courtyards and surroundings
- Absence of open defecation
- Use of sandals when entering the latrine
- Hand washing practices at critical times (before eating, feeding children and preparing food and after defecation, cleaning baby's bottom and cleaning baby's faeces)
- Soap/ash/water available in or nearby the latrine
- Dispose of solid waste in a fixed place
- Safe collection of water from an arsenic-safe source (rinse inside and outside the pitcher/kolshi), safe transport (cover the kolshi from water point) and safe storage of water (cover kolshi at home and keep the kolshi at a higher place away from the ground)
- Drainage system for disposal of waste water (cleanliness of drainage, clearing of drains away from the water point, no waterlogging) and status of water point platforms
- Gender roles in water collection, latrine cleaning, disposal and cleaning of children's excreta.

Based on the observations, the CHPs conduct hygiene education using different local forum as follows:

Courtyard meeting

Periodic courtyard sessions are being arranged with 15-20 neighbouring households in each cluster at least six times a year at different times, to suit men, women, children, adolescent boys and girls from different socio-economic groups (rich, middle, poor, poorest). Participants visit their own households in a group before the meeting to assess the hygienic situation then discuss the findings. Based on observations and discussions, people make a plan on hygiene improvement and sanitation (individual or group ones as they like) and follow it up in each meeting. If necessary, they can add new activities in the plan or delete activities that are already done. The CHP encourage participants/households to monitor/follow up on the situation by themselves as a group in each meeting and check that it is done, and if not, to find out why.

The CHP introduces a sanitation or hygiene topic. The group discusses one key hygiene practice elaborately in one session, using relevant communication materials/tools (for men and/or women and/or children and/or in a mixed group). The CHPs provide information on arsenic and emergencies, particularly on flood management. S/he discusses and demonstrates hand washing to or by participants and explains its health implications using flash cards, jug/bowl, soap and towel or with local materials as appropriate.

⁴ Source: Terms of reference for field agencies for implementation the activities in Upazilas under "Sanitation, Hygiene Education and Water Supply Programme in Bangladesh (SHEWA-B)"; WES Section, UNICEF Bangladesh, 2007

The CHPs create a link between the households visit and courtyard meeting (and share household visit findings in the courtyard meeting in a way that encourages the participants to improve their hygiene practice) and also disseminate other messages as requested by the community (EPI, nutrition, avian flue, child rights, birth and death registration, dowry, reproductive health). Occasionally he/she invites health and family planning workers, religious leaders, elderly people, Gram Sarkar and women UP member into the courtyard meeting to motivate the community people. He/she invites private latrine producer or mason, clay potters (where available) as a resource person in the courtyard meeting on latrine construction discussions as appropriate.

In courtyard meetings, the CHPs also discuss gender roles in water collection, latrine cleaning, disposal and cleaning of children's excreta to encourage boys and men to take part in these activities. Three flash cards and pictures for three piles sorting are available to assist with discussions on these topics. She/he develop monitoring chart/tools on behavioural changes in consultation with the participants of the courtyard meeting and also, from time to time, update cluster/ward map, and discuss progress.

Facilitation sessions in tea stall/grocery shop at ward level

The CHP conduct tea stall/grocery shop session on hand washing including demonstration (soap, bowl, jug, and towel) and discuss maintenance of food hygiene in the tea stall itself. Visit existing grocery shops and encourage shop owners to stock hygiene items such as soap, dettol, sandals,

nail clippers, bleaching powder, latrine brush, liquid latrine cleaning agent, sanitary napkin, plastic pan, mosquito net, etc.

Focus group discussion on menstrual hygiene

The CHP organise separate courtyard meetings with adolescent girls and young women on hygiene and sanitation (open defecation) particularly management of menstrual hygiene once every two months. The meetings include a demonstration on how to use rags and pads. She shares information and ensures that adolescent girls practice appropriate menstrual hygiene (use clean rag/sanitary napkin, wash used rag with soap and adequate water, dry in sunlight and store in a clean place for future use. During menstruation, clean genitals frequently with safe water only to prevent itching and infection in genital). Also inform that cotton, disposable sanitary napkins must be buried after use, and not thrown down water seal latrines otherwise the system will be blocked.

Conduct group meetings with working people

The CHP identify opportunities to hold group meetings with people at their work (men and/or women) such as:

- Brick field workers;
- Rice huskers;
- Agricultural field labourers (motivate them to cover excreta with soil after defecation during working in the field if latrine is not available);
- Road Maintenance Programme members (motivate households to allow RMP members to share their latrines during work time).

Annex 4 Descriptions of different participatory tools

In Bangladesh, the following visual participatory tools (but mainly flash cards) are being used by different organisations to assist courtyard sessions, focus group discussions and tea stall sessions. CARE SAFER and WaterAid Bangladesh primarily developed these tools in the 1990s, but other organisations latterly developed their tools and materials, especially flash cards based on these ideas (Safi, 2001).

Below is a description of various tools, their learning objectives and process of use for tools widely used in Bangladesh. At the end, some suggestions are given for alternative uses, to encourage variety and creativity. Facilitators, groups and community members can be encouraged to come up with their own ideas on this.

Three-pile sorting game

Objective: Understanding of good and bad hygiene practices, action for good hygiene practices.

Tool: Set of 24 to 30 coloured, laminated illustrated cards showing good and bad hygiene practices. Alternatively, own local drawings (see below)

Time: 1 hour

Process:

Step 1:

Give out the sets of three-pile sorting drawings, and three heading cards, one with the word “good”, another with the word “bad” and third with the word “in-between” (symbols to represent these qualities could be used instead of the words).

Step 2:

Ask the participants to sort the drawings into three piles:

Good: those you think show activities that are good for health

Bad: those you think show activities that are bad for health

In-between: those you think show activities that are neither good nor bad for human health, or which you are not sure about.

Step 3:

After 20-30 minutes, ask the participants to explain their selections and why they made these choices.

Start a discussion on the way the participants have sorted the drawings to give participants a chance to share what they know with the rest of the group. As the facilitator, clarify any misconceptions about disease transmission routes, and encourage the group to think carefully about their choices, moving cards from one pile to another if necessary. The group may realise that it has gaps in its knowledge and look for ways to fill them.

Step 4:

Ask the group to consider and discuss common behaviour within its own community. Ask the group to consider whether this behaviour is similar to any of the good and bad practices it has identified.

Step 5:

At this stage, or in a later session, the group may start to discuss ways of eliminating the bad practices it has identified in its community. Encourage this discussion and ensure that the group keep a record of suggestions made.

Step 6:

Discuss any of the practices and why it is identified as a bad practice. Discuss how the bad practice is causing problems in the community and how participants can eliminate it and encourage others to eliminate it.

Step 7:

Discuss any of the good practices and why it is identified as a good practice. Discuss how participants can encourage other people to use this good practice.

In large groups: if two or more sets of three-pile sorting drawings are available (eg photocopies in plastic slips), and the group of participants is large, the group can be split into two or more sub-groups. Each sub-group then carries out the exercise, and the facilitator encourages a debate between groups on why they made their choices.

This exercise is also useful as a baseline survey tool, to assess people's understanding of disease transmission routes and hygiene practices, and to make an inventory of good and bad practices, etc.

Faecal oral disease transmission game

Objective: How faeces spread, how to stop faecal oral transmission

Tool: Set of laminated, coloured, illustrated cards showing possible transmission routes of faecal contamination (feet, hands, drinking water, food, eating utensils, etc.). Alternatively, adults, adolescents and children enjoy making their own drawings of the different items involved in transmitting faeces/germs from a sick to a healthy person (eg by linking pieces of string or twigs)

Alternative:

Participants that feel confident enough to draw enjoy making drawings of the local good and bad conditions, practices and participation and decision-making situations with felt-tipped pens on half-A4 sheets. Sorting is then done twice: firstly on good and bad habits/situations (two rows), and secondly on good habits/situations that already/do not yet exist and bad ones that exist no more and that are still present (the end is four rows). The group then chooses their priorities from the not yet practised good behaviour and the still practised bad behaviour that they want to change first (eg order rows by priority or choose three top priorities and prioritise these). They then make a plan on how improvements can be made, who will do what, when and how, and how outcomes will be monitored, documented and shared.

and then discuss in the usual way where and how routes can be blocked.

Time: 1 hour

Process:

Step 1:

After exchanging greetings give the set of cards to the group using:

“One drawing shows a person defecating openly. Another shows a person's mouth. (Show the drawings). Please use the rest of the drawings to try and create a diagram to show different ways in which faecal matter might enter the mouth. You can draw arrows between the different drawings to show the ways that this might happen.”

Step 2:

When the participants have made their diagram, ask them to show and explain it. Respond to any questions raised and clarify any misconceptions.

Step 3:

Now facilitate a discussion to help the participants use their new knowledge to examine their own situation. Stimulate discussion for people to identify:

- The transmission routes in the community
- The problem areas and hygiene behaviours that are putting people at risk.

Step 4:

Facilitate a discussion on how they can block the transmission routes. Before doing this I like to ask the group to identify at which points the different groups in their community are most at risk (eg

male and female farmers/land labourer in fields, babies/infants crawling in yard, etc). After the blocking I go into what different actors/groups can do to block their specific risks, and what the responsibilities are of mothers, fathers, older siblings etc to ensure that different risks are blocked. This usually brings in the gender angle very nicely and naturally without tensions).

Promotion of hand washing practice (three-pile sorting)

Tool: Set of 21 coloured, laminated illustrated cards showing different hand washing situations, including four different cards of hand-washing materials. (Sets of photocopies in plastic slips allow local groups to keep their own materials and replay the exercise with others)

Objectives:

- Assist the community people to identify the importance of hand washing in different situations and promote them to develop the hand washing habit

Alternative:

Deal out the drawings to several people, including some poorer men/women (so more participate). Do not explain anything, just ask them to place the pictures or drawings on the ground. Then ask the group to discuss what they see and discuss/ask questions on cards that are not clear. If needed, encourage other people in the group to explain rather than give the answer yourself, to encourage knowledge sharing and building self-confidence and ownership. Then ask them to put the open defecation drawing on one side and the drawing of the mouth on the other side. When people make their own sets of drawings, the advantage is that they can keep the material and play the game with others.

Since drawing takes time, it is also possible to make photocopies and give all groups their own sets, which they can keep. School children like to colour black and white copies. If funds allow, each drawing can be kept clean and neat during storage and use by placing it in its own loose, thin plastic folder (pocket). The children's leader is responsible for keeping the drawings in their pocket so that they can play the game repeatedly with friends, parents and neighbours, etc. This also goes for copied drawings of the sanitation ladder. Youth groups in Sri Lanka loved to organise courtyard sessions with them as part of CLTS (pers. com. C. Sijbesma)

Alternative:

1. Two sub-groups that already know the activity compete on how fast they can lay a good diagram. Each group chooses a name first, e.g. two animals, two famous sports stars or clubs, etc. The 'losers' then visit the 'winners' and vice-versa to spot errors.

A group that is familiar with the diagram lays it out on the ground. In sub-groups, they then think up a story based on a risk of their choice. Each sub-group tells, or acts, the story to the others. At the end participants vote for the story/play they liked best. Finally they discuss the particular risk from each story/play, whether it still occurs in the community and in the participants' households, why, what can be done, who can do what (women, men, adolescent boys, girls, children, etc), and how to monitor change etc.

- Explain to the community people how to wash hands properly and promote them to develop good hand washing habits
- Assist the community people to select effective hand-washing materials and inspire them to use hand-washing materials.

Time: 45 minutes

Step 1:

After informal introduction, show pictures and discuss with participants when hand washing is essential, hand-washing materials and proper hand washing method.

Step 2:

Ask participants the following questions and let them get involved in a group discussion:

- When do we think hand washing is essential?
- Why is hand washing important?
- Do you think hand washing is always important?

Step 3:

Give the participants the *hand washing event* cards and ask them to lay them out on a cloth/floor/on soil, etc. Give them time to look at the cards, pick them up, discuss, ask clarifications from each other, etc.

When they have finished seeing the cards, ask the group to sort them into three groups: group 1: very important, group 2: less important, group 3: not needed. Ask the participants to give explanations and to correct each other as they sort cards into groups (known as horizontal learning).

Step 4:

Show pictures of *hand-washing materials* and ask participants to sort them according to effectiveness and give explanations as they select hand-washing materials.

Step 5:

Ask participants to explain, demonstrate or role-play the *process of hand washing*. After listening to some of them, show the two hand washing cards on which hands they wash. Ask them which one they think is more effective and why. Ask a volunteer to show the proper way of washing hands in the absence of soap. Invite the group to comment on what they see.

Step 6:

Discuss *when* hand washing is essential, *what materials* will be used for hand washing, and *how* to wash hands.

Step 7:

Discuss with participants how we can develop the *hand-washing habit* among ourselves and encourage others to develop this habit. Which groups may not easily develop the hand washing habit and why? What could be done?

Step 8:

(With women, men, children, etc): What roles can wives/mothers play in proper hand washing? How can husbands/fathers, older brothers and sisters, and friends help?

Encourage everybody to participate in the discussion and give thanks for participation.

Sanitation ladder game

Objective: The objective of this exercise can be two-fold: (1) to help communities determine where they are in terms of hygiene behaviour in general and sanitation practice in particular, assisting them and health workers to reach a consensus on the direction and steps needed for making progress in sanitation. (2) To help individual households without a toilet, or those wishing to improve their toilet, to see what options there are, learn about the pros and cons of each option (including costs and scope for using local materials) and make an informed choice on what they want and can afford. The activity should also stress the fact that a simple latrine that is sanitary (isolates faeces) is as good as an expensive latrine, and that hand-washing materials must be available (and used) at a latrine.

Tool: A series of laminated illustrated cards, showing various sanitation practices and facilities.

Having a set of A4 photocopies with plastic slips allows groups to keep their own set and repeat the game with others.

Alternative:

Ask the group to bring the materials that people locally use to wash hands in different ways. Ask the group to form two sub-groups. Ask the first group to demonstrate or role-play a locally common way of hand washing, which they think is wrong. Ask the other group to comment afterwards. (They may comment on the how, with what, who, and when). Now ask the second group to demonstrate/role play the way in which they think that hand washing is best done. At the end start a discussion asking what they learned about hand washing, good and bad? The how, with what, when and who? Then as before: who practices and who has problems, and why? What can be done? How to monitor, etc.

Time: 1 hour

Process for objective 1:

Step 1:

Introduce the exercise. Give the participants the pictures depicting the various methods of excreta disposal.

Step 2:

Ask them to sort the pictures out into “steps” on a ladder according to improvements in sanitation practices. Participants usually take 15- 20 minutes for this.

Step 3:

When the groups have completed this task, ask the group to explain its sanitation ladder.

Step 4:

Encourage the group to divide the defecation practices into acceptable and unacceptable behaviour, based on whether they result in isolation of faeces (place at the bottom of the ladder) and what is the ideal behaviour at the top.

Step 5:

After the presentation, encourage a group discussion covering:

- In general, at which step is the community?
- Which practices are bad and which are good for sanitation?
- Why have people not moved from one step to the other along the ladder?
- Why are people not constructing latrines?
- What does it mean for our community when some have no (good) latrines?
- Is it necessary to move directly from open defecation to the construction of latrines?

- Are there any other steps we can take to improve sanitation practices, and why?
- What to do about people who are unable to build a sanitary latrine?

At the end, facilitate a discussion with the participants on what they have learned during the activity, including what could have been better.

Process for objective 1:

Step 1:

Welcome the participants and mention the subject of the meeting. Give a few pictures to several participants making sure that they do not go only to the 'elite' in mixed groups. Ask them to spread the pictures on the floor. Ask the participants to look at and handle the pictures and to discuss them among themselves. Clarify questions if directly asked.

Step 2:

Ask the group to sort the pictures out into "steps" on a ladder according to improvements in sanitation practices. Participants usually take 15-20 minutes for this work.

Step 3:

When the groups have completed this task, ask the group to explain its sanitation ladder.

Step 4:

Encourage individual participants to reflect on where their household is on the ladder and if they would like to improve. Encourage them to discuss the pros and cons of the models, e.g. on costs, availability of materials, options for using local materials, ease of use, including by children, the elderly and the disabled, ease of maintenance, water demand, composting, etc. Stress that there

is no need to start with a costlier model if one cannot afford that and that any model can be improved over time. Encourage knowledge sharing, and new ideas on local material use and designs, and help for those unable to construct. It may even be possible to go and visit different models in the community to learn more on costs, materials, pros and cons.

Step 5:

Ask those interested in building/improving toilets to remain and later discuss implementation, e.g. to buy material and transport in bulk for reduced costs and stronger claims when goods are inferior/damaged on delivery. Ask for feedback on the exercise and discuss possibilities for participants to become facilitators of others, using their own (copied) picture set. When others have left, arrange follow-up actions with the two groups.

Let's grow the habit of hand washing

Objective: Participants understand the need for hand washing through a happy atmosphere and encouragement of habit forming.

Tool: Snake and ladder game

Time: One hour

Process:

Step 1:

After exchanging greetings let the participants choose four people to play the game

Step 2:

The game will start when '1' comes on top of the (Sakka). Ask participants to discuss each picture

When the Sakka falls on the following squares we will do the following activity:

| Square | Activity |
|--------|--|
| 13 | If children are present they will stand up with two hands crossed. When it is stated '1' they will close their hand and when it is stated '2' they will open their hand. After doing this twice all will clap and sit. |
| 20 | We will sing a song together |
| 34 | She/He will get another chance to throw the (Sakka). This is to encourage him/her to save money so that he can buy soap |
| 48 | We will say, lets wash our hands and legs with soap and go home. |

at the bottom end of the ladder and the mouth of the snake:

- What is seen in the picture?
- Is it a good or a bad practice? Why?
- Why do we need to practice this habit?
- Let's reward him/her for this good practice. Let's clap as s/he goes up the ladder OR:
- Let's cry for his/her bad practice as she/he goes down the ladder.

At the end of the game following question might be asked:

- For which practices one gets ladder?
- For which practices does a snake bite?
- Which habits will we develop within ourselves and how can we encourage other people in the community to develop these habits?

Alternative:

1. Ask the group for two volunteers, one to draw the good community and the other the bad one with felt-tipped pens. The group as a whole guides the drawers on what they draw. The facilitator can bring up things such as forestation, source protection, water access and distribution, leakages, etc to be added. Then the process is as above, or she/he facilitates a direct discussion about the differences: what, why, to what effects and what can be done.
2. The same as above, but individual participants draw houses, school, mosque, clinic, etc on small slips of paper and stick these onto two large sheets of paper. They then divide into two groups and one group draws in the bad environment and the other the good one. The process is then the same, as mentioned above.