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SOUTH ASIA HYGIENE PRACTITIONERS' WORKSHOP

Contributions of Village WASH Committee in breaking the cycle of unhygienic behaviours in rural Bangladesh

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This paper summarizes the experience of BRAC-WASH Programme in hygiene promotion through setting up village WASH Committees (VWCs) in each village and their contributions in changing unhygienic behaviours/practices. Considering the greater impact, hygiene promotion has been recognised as the "backbone" of the WASH programme seeking to ensure equal (bottom-up) participation to achieve the following:

- breaking the contamination cycle of unsanitary latrines
- · eliminate the use of contaminated water, and
- prevent unsafe hygiene behaviours.

It has been observed that the VWCs have been playing a pivotal role in improving the overall WASH situation in their respective villages. In order to achieve the above objectives, key hygiene messages are being disseminated under the auspices of VWCs through community cluster meetings. The main emphasis of this approach is to focus on changing people's hygiene behaviour by strengthening existing "good" behaviour and changing unhygienic behaviour, to ensure that all aspects that contribute to healthy hygiene behaviours are being addressed and applied on the three key aspects: knowledge ("knowing"), practices ("doing") and attitudes ("feeling"). The results to date indicate that VWCs are the key drivers in ensuring a positive outcome of the WASH programme by driving out unsafe hygiene behaviours within a community through a collective concerted effort.

Introduction & Background Information

Bangladesh faces multiple challenges in its water, sanitation and hygiene sector. According to the Joint Monitoring Programme of WHO and UNICEF, the latrine coverage in Bangladesh increased from 33% in 2003 to 36% in 2006; and, the safe drinking water supply coverage increased from 75% in 2003 to 80% in 2006. The picture of water in rural areas changed significantly with the discovery of arsenic in the early 90s, the depletion of the ground water table in many areas due to massive extraction for agricultural purposes, intrusion of saline water into fresh water sources and other problems. The Government's target for sanitation, 100% coverage by 2013, goes significantly beyond the Millennium Development Goal (MDG) 7. Only roughly one in four (26.7%) people currently reportedly wash their hands with water, soap or ashes after defecation (only 7% of those who wash their hands use soap). Hygiene-related diseases in Bangladesh cost 5 billion taka (US\$ 80 million) each year for treatment alone.

¹ MDGs 7: (Target 10) halving the number of people without sustainable access to safe drinking water and basic sanitation by 2015.

² S.A. Ahmed, Water & Sanitation Program, personal communication April 2002, based on "Health Care Expenditures in Bangladesh" in "Health Situation and Health Care Expenditures in Bangladesh, Evidences from Nationally Representative Surveys", BBS, April 1999

Moreover, Bangladesh strives to achieve its relatively ambitious targets of achieving 100% sanitation and water supply coverage for a population of over 144 million by the year 2013. There have also been several critical challenges towards achieving its goals such as reaching the poorest people/hard to reach areas.

Impact of improved hygiene

Hygiene can make an important contribution to the improvement of the lives of the poor. It also can improve the health status of women, children and reduce the burden of disease, ultimately enhancing the livelihoods of their families. Evidence shows, the simple act of washing hands at critical times – after defecation, before eating, etc – has the potential of reducing the incidence of diarrhoea around 40%. Several studies have shown that consistent hygiene behaviours can have an immense positive impact on health and well-being. Some research findings related to this are:

- The simple act of washing hands with soap and water can prevent more than one in three
 cases of the diarrhoeal diseases. Roughly 1,000,000 deaths from diarrhoea a year would
 have been averted by consistent handwashing.³
- It is estimated that about 1 in 3 children in Bangladesh suffer from helminthes infestation. Consistent use of toilets, wearing shoes, covering food and handwashing could prevent much of the worm infestation.
- Recent literature has also highlighted that roughly half the bacterial contamination of water comes from unsafe carrying of water from the well, unsafe storage and unsafe dipping/usage.
- Having, maintaining and using a toilet are, in itself, an issue of personal dignity, providing
 privacy and, particularly for women, a greater measure of safety. It also reduces urinary
 tract infections as women will drink and eat at more regular intervals during the day

BRAC-WASH Programme

BRAC⁴, the world's largest development organisation in the southern hemisphere, has been working since 1972 on poverty alleviation and the empowerment of the poor. Since its inception, BRAC has brought an exceptionally strong and consistent dedication to improving the quality of life and empowering women and poor families through a holistic approach of development. Aligned with other interventions, BRAC launched a comprehensive intervention on Water, Sanitation and Hygiene (WASH) in May 2006 aiming to improve the health situation of the rural poor, and enhance equitable development through: (1) provision of access to sanitation services for 17.6 million people, (2) promotion of safe hygienic behaviour through an education campaign for 37.5 million people, and (3) provision of safe drinking water for 8.5 million people (1 million through new supplies & 7.5 million through repair of existing facilities). Indeed, the overall strategy is centred on hygiene and behavioural change. Thus creating the conditions for behavioural change, and sustaining these new behaviours, is the main focus of the programme.

A baseline survey was undertaken in 2006-07 in BRAC-WASH area, which was undertaken in 50 sub-districts taking 45,000 sample households to record benchmarking information. Intervention for sustained change in hygiene behaviour is one of the major components of the programme. The baseline survey presented an interesting insight into the hygiene awareness

³ Curtis, Val and Sandy Cairncross. Effect of washing hands with soap on diarrhoea risk in the community: a systematic review. **THE LANCET Infectious Diseases** Vol 3 May 2003 http://infection.thelancet.com 275
Varley, R.C.G., Tarvid, J. & Chao D.N.W. 1998. A reassessment of the cost-effectiveness of water and sanitation interventions in projects for controlling

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Margaret A.K. Ryan, Journal of Preventive Medicine. August 2001

⁴ BRAC stood for Bangladesh Rehabilitation Assistance Committee (1972-73) and Bangladesh Rural Advancement Committee (1973-94). From 1994, it is called only BRAC. More information about BRAC is available at: www.brac.net

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and practice of the women studied. Level of personal hygiene and sanitation practices was found to be poor. Awareness about the cycle of disease transmission was vague as demonstrated by the fact that very little importance was given to the contamination potential of children's stool or washing hands as critical times. The baseline survey study (75,000 samples) revealed the need to build up *community knowledge* and *awareness* about the *cycle of disease transmission* including the importance of washing hands with soap. The study found 32% of the households surveyed were using sanitary latrines while 39% were using latrines with broken water seals, and 29% defecated in the open. Of the existing latrines, in majority cases (66%), it was found that there was smell of foul odour and/or contained visible fecal matter. It was also ascertained that huge knowledge gaps existed about the use of sanitation facilities. In both cases of water and sanitation, the conditions of the hardcore poor households were worse when compared to the rest of the village. Due to the need for undertaking knowledge and awareness building, BRAC adopted a community-based approach for behaviour change communication.

Key Behaviours and Indicators

The programme has set out the following key hygiene standards, which are also utilized as a set of indicators:

Water	Safe water sources are used for all cooking and drinking		
	Safe water storage: clean storage pot, covered pot, do not dip fingers in pot		
	Maintain water source used for drinking/cooking: cement platform, no cracks,		
	pump with closed top, and so on		
Latrines	All households have their own or a shared sanitary latrine		
	Use of hygienic latrines by all, irrespective of age		
	Dispose of infant/child excreta in latrine		
	Maintain latrines: pit not filled up, no visible faecal matter		
	Water for personal cleaning is provided in or near latrines		
	Use of an adequate amount of water after defecation		
	Everybody wears sandal in side latrines		
Hand-	Hand washing of both hands with soap and enough water, is practiced by		
washing	everybody after defecation and before taking food and after cleaning child/baby excreta		
	 Soap (preferably non-abrasive) is available and used for hand washing and personal hygiene in half or more of the poor households 		

BRAC WASH Programme has given high priority to hygiene promotion and education within the community to preserve and promote the health of the individual and the community, to improve personal hygiene, and the cleanliness of the community. Hygiene has recently been emphasized as the 'most economically sustainable prevention strategy' (Stanwell-Smith 2003), and also as a cost-effective intervention for child survival in developing countries at only a fraction of the cost of water supply and sanitation according to Larsen (2003). WASH recognises that safe water and sanitation facilities can contribute to improving the reproductive health of women. Therefore, the Programme has been designed in such a way that it breaks the cycle of traditional attitudes and unsafe hygiene behaviors. Women's contributions are crucial in enhancing knowledge, skills and experience in ensuring safe water and sanitation practices. Mothers, wives and sisters are often the best teachers.

Impact/output indicators of the programme

Impacts

- Impact on morbidity and mortality from water/fecal-borne diseases
- Sustainable access to safe drinking water & basic sanitation
- Behavioral change with regard to hygienic practice

Main outputs (October 2009) of the programme

Sanitation	Households (average 4.5 persons)
Installation of total latrines under WASH programme (January	24,34,056
2007-October 2009)	(app. 11 million people)

Water	Number
Construction of Deep Tube well by BRAC WASH	2,222
	(app. 299,970 people)
Loan support to construct TW platform under BRAC WASH	31,567
	(app. 426,155 people)
Piped Water Supply System under BRAC WASH	4
	(app. 5,400 people)

VWC: Mainstay/Nucleus of the Programme

 Village WASH Committee (VWC) has been established in each programme village with 11 members (amongst which 6 are female) for an average of 200 households in order to stimulate bottom-up participation and planning. The VWC members represent the entire village, including the poorest people and the various community (socio-economic) groups. Two elected Union Parishad members/or local community leaders are selected as advisers. Indeed, by following a community participatory process, BRAC-WASH Programme has formed 39,870 VWCs throughout the programme area.

After formal orientation, each VWC develops a Village WASH Plan on the basis of a needs assessment undertaken through participatory exercises and social mapping (PRA) to improve the overall hygiene situation. They have been doing advocacy work at the level of the Union Parishad to secure financial support for latrine installation for the hardcore poor. The VWCs also strongly focuses on women's participation in the decision-making process. Above all, the VWCs serve as the focal point of all WASH activities and act as a catalyst for the community by involving all the different stakeholders.



Social mapping session

Social map presentation

Consensus building

. The VWCs have now moved on to achieve the goal of improving the hygiene situation in the community for all. Through undertaking different actions/activities, mostly, the VWCs have been creating an *enabling environment* that contributes to achieving WASH objectives, and sustaining positive behaviors, as there is constant self-monitoring and corrective works where necessary. Literature recognizes that empowerment in the context of water and sanitation is the best way to

ensure sustainability of the programme.



It has been evident the VWCs are serving as a platform for the poor, especially poor women, to participate in programme activities and thereby ensure that they are benefited from the programme. However, BRAC, as an "outside-in" partner, facilitated the whole process of setting up the committees.

VWC meeting

Evidence shows that women benefit considerably from an effective and integrated WASH intervention. However, women play a pivotal role in hygiene promotion that has tremendous effect on improving health status of women, children and reduce disease burden that ultimately enhance livelihoods of their families. The potential role is being played by women in WASH, aligned with other interventions within BRAC, such as, microfinance, social development, specially targeted ultra-poor, adolescent development and health, special focus has been given on empowerment of the poor, especially women. Poor and particularly women are seen as the active participants in all stages of the implementation of the programme. Building latrines helps enormously, in terms of health, safety, privacy, dignity, convenience and increases productivity. Similarly, well-located water sources reduce women's burden, ensure safety and increase privacy.

VWC, as driver for hygiene promotion

Hygiene promotion has been given high priority, since the VWCs are working to empower the poor and marginalized groups; they have the potential to be drivers for ensuring equal participation irrespective of age, sex, gender, economic class ethnicity and religious believers. They are also playing pivotal roles in promotion and awareness building in relation to hygiene. Through setting up VWC in each village, BRAC-WASH has been focusing on breaking the contamination cycle by inducing behavioural change for all individuals, households, and the entire community. The VWCs focus on hygiene education for:

- men
- women
- adolescent girls
- adolescent boys
- children (9-11 years)
- local community leaders
- religious leaders
- · saving/micro-credit groups, and
- · health volunteers, and other social groups.

The VWCs have been cooperating to organise community cluster meetings with above groups to disseminate the following 5 key/core hygiene messages on hand washing during critical time, 9 core basic messages relating to sanitation and hygiene and 5 core basic messages on safe drinking water to build their knowledge base that may be called "knowing".

Table: Key WASH Messages

Handwashing

- Wash hands by rubbing both hands with soap before preparing food
- Wash hands by rubbing both hands with soap before serving food

- Wash hands by rubbing both hands with soap before eating and feeding the baby
- Wash your left hand first and then wash both hands thoroughly with soap after defecation
- Wash your left hand first and then wash both hands thoroughly with soap after baby's defecation and disposing the faeces in the latrine.

Safe Water

- Use the arsenic free water from the tube well, marked green for cooking and drinking purposes
- Collect water in a clean container
- Cover the water container with a clean lid while carrying the container
- While storing the water, the container should be clean and kept in a clean and dry place which is slightly elevated
- Use the water by pouring from the container instead of dipping into it.

Sanitation

- Always keep the latrine clean
- Pour water in the pan before defecation
- Keep sufficient water in /or around the latrine and pour enough water in the pan after defecation
- Make soap available in / or around the latrine for use
- Use a pair of sandal specified for latrine while going to the toilet
- Use your right hand for carrying the water pot while going to the latrine and after using latrine
- Wash both hands with soap after using the latrine
- Everyone in the family including children have to use sanitary latrine
- Baby's faeces should be disposed in the latrine and the latrine should be cleaned subsequently with enough water.

After first round of information dissemination that takes approximately 2.5 months with the emphasis on different aspects of the Programme. Reinforcement of the messages is also done in the same community. The VWCs have also helped to organise popular theatre show, folksong sessions (e.g. Gomvira) in different areas to make learning fun and effective.

The Foot Soldiers

The community WASH workers, or Programme Assistants (PA), are the foot soldiers of BRAC-WASH programme, and play a critical role in hygiene education and promotion. Going door to door, the PAs are the first point of contact for the community members, VWCs and Shasthya Shebika, community health volunteer of BRAC health programme. All Shasthya Shebikas are members of both (BRAC) Village Organisation and VWC. Each PA is assigned to on average 2,500 households and go door-to-door to educate and raise awareness. They conduct women and adolescent girls cluster meetings in her catchment areas to raise awareness level. The PAs provide hygiene education, collect basic WASH information and conduct follow-up and monitoring visits to observe the water and sanitation facilities on a regular basis.

The PAs work to educate and mobilize women and adolescent girls regarding critical hygiene matters. For example, they provide information on hand washing during critical times such as ensuring the menstruation cycle to educate and encourage the use of latrines and tube wells in a hygienic manner. They also provide other essential information regarding water, sanitation, and personal hygiene.

The collective work of the PAs and VWCs serve as a backbone for all activities and aspects of the BRAC-WASH programme. The PAs work to improve the health of their communities, and they also gain respect and income as active and knowledgeable community members. The activities of these dedicated community WASH workers reflect BRAC's philosophy that basic door-to-door services have an immense potential to improve the health of the poor especially in hard to reach areas.

In addition, the VWCs also help in delivering hygiene messages in the mosque during the jumma prayer based on the sayings of Al-Quran and Al-Hadith. The chairpersons and other general male members also remain present in the mosque and enhance the discussion on WASH aspects. The VWCs have also been ensuring the establishment of water and sanitation facilities in order to facilitate hygiene promotion. This is being achieved through different ways, such as: providing loan support to the poor for installation of new latrines, construction of tube well platforms, grants for the installation of sanitary latrines for the hardcore poor families. This

has helped shift mindset and change attitudes of the people towards better health and hygiene conditions, including the testing of water quality in arsenic-affected tube wells. They are also enhancing the commitment of the community to build awareness on safe water, and other bacterial contamination. The active VWC members also go and check whether the people properly maintain their latrines in a hygienic manner whether there is supply of safe drinking water and check on the practice of washing hands properly with soap. They also work together to ensure the usage of using of water and sanitation facilities in a hygienic way. They also undertake some monitoring work to follow up Operation & Maintenance (O&M) activities. Through collective VWCs develop knowledge-base, build community confidence, and mobilise local resources/funds for enhancing their locality positively. Another important aspect of their input in undertaking special works to convert the unhygienic latrines into hygienic ones through the addition/changing of water-seals.

Evidence from the community

In general, it is observed that the VWCs have been undertaking a massive campaign to promote hygienic behaviours in order to achieve programme set targets. After formation of the VWCs in phased manner, all households of the programme areas have been provided with the key hygiene messages. In close coordination with VWCs, the Programme Assistants and Programme Organisers of BRAC-WASH Programme have been discussing different aspects of WASH which included: water safety plan (source, collection, transportation, preservation & use), sanitation (use and maintenance), hand washing (critical times), personal & menstrual hygiene for women and girls, waste disposal at household, dumping facilities for girls, operation & maintenance of water and sanitation hardware facilities and improvement of drainage system (village & individual). Moreover, Musullies (Muslim believers) have been provided with 12 key hygiene messages during jumma prayer by a trained Imam in 18,500 mosques (approx. 3.6 million people, i.e. average 200 Musullies/mosque) using the khutba materials produced by BRAC with the aid of imams The students and teachers of primary, non-formal primary (BRAC and other NGO), secondary schools and madrasas (Islamic educational institutions) in every village have also been orientated on key hygiene messages including personal hygiene with support from the VWCs.

Nurjahan's new life

Nurjahan Begum (50), a widow, a moderate poor, lives in Khilhinguli village in Mirsharai Upazila. She along with her 3 children used to defecate in the bushes before WASH intervention. When she learnt about the importance of using hygienic latrine, she applied to VWC for support. Accordingly she received a loan from BRAC-WASH programme through VWC amounting to taka 1,000 and installed a hygienic latrine.

After introducing WASH programme, her family is well aware about hygiene promotion and hygiene practices regarding operation and maintenance of sanitary latrines and tube wells. She, along with her children and neighbours did not always washed their hands before serving food, eating food and cleaning of baby excreta, after defecation and before feeding children. Over time, Nurjahan found her family members have been adopting the new hygiene practices (regular hand washing, hygienic use of safe water and sanitation, personal hygiene maintenance). They are now also aware on transmission of germs, reduction in waterborne diseases and water safety issues. Now she feels very happy and proud. The impact of practicing hygienic behaviours have been financially, socially and improved their personal health and the cleanliness of the surrounding environment. As now there is now no possibility of stepping, seeing or smelling human excrement.

Based on the Village WASH Action Plan (VWAP), mostly the VWCs undertook special projects to break the cycle of unsafe hygiene behaviours through installation of hardware facilities (latrine, tube well platform, water seal change). As of October, the Programme has increased

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the sanitation coverage tremendously compared to the baseline (31%) at the initiation of the programme. In order to create hygienic water and sanitation facilities, in cooperation and coordination with the VWCs, the WASH Programme has achieved the following as on October 2009:

- constructed 2,222 deep tube wells for approximately 299,970 people, 4 rural piped water supply systems for approximately 5,400 people, 1 pond sand filter, 2 rain water harvesters and 1 water treatment plant for the people of arsenic affected areas and provided 202 water filters in arsenic affected families to have access to safe water supply for drinking and cooking purposes
- provided loan support to construct 31,567 cemented platforms to convert unhygienic tube wells into hygienic through loan support for approximately 426,155 people
- provide loan supports to 103,454 moderate poor families to install sanitary latrines for approximately .46 million people
- installed 274,963 latrines with superstructure for hardcore poor families for approximately 1.23 million (1,237,333) people
- ensured proper distribution of Union Parishad to provide subsidy (latrine materials) to 535,378 hard core poor families to install sanitary latrines for approximately 2.4 million people
- helped to distribute 187,826 latrines to the hardcore and poor families by BRAC other socio-economic development programmes for approximately .84 million people
- helped to distribute 239,438 latrines to the hardcore and poor families by other organizations/agencies for approximately 1.1 million people
- mobilized people to install 1,092,997 for approximately 4.9 million people
- converted 1,568,862 unhygienic latrines into hygienic through changing and repairing water seals of the latrines for approximately 7.06 million people
- installed 4,640 sanitary latrines in 2,320 secondary schools to create separate facilities for girls' students for approximately .46 million (average 200 girls per school) students

In some villages, the Programme has initiated initiatives to introduce home garbage disposal mechanism in household level some of the families installed separate urinal facilities in their houses. The VWCs have been doing advocacy at the Union level to collect latrine materials from Union Parishad (ADP block grants) and provided to hardcore poor families. The VWC members, WASH staff and Shasthya Shebikas are monitoring all the latrines and tube wells on regular basis. Through these initiatives, the village has initiated a massive campaign to improve the sanitation, safe water and hygiene behaviour tremendously. It may be mentioned that a high portion of latrines are still operating after 2 years, which was created with the collective concerted efforts of VWCs. It is also evident that latrines are also kept clean in most cases. Soap and water are easily available and near each other for handwashing in each household. Sandals are also available in most of the households to use in the latrines. Most of the tube well platforms are also found clean compared to initial stage. Most of the mothers used to dispose of infant/child excreta in latrines rather throwing outside. Most of the people use adequate water for personal cleaning. Moreover, open defecation has been stopped in most of the areas due to VWC intervention.

Conclusions

Experience shows that hygiene especially behavioural change receives limited attention in traditional interventions. The success of any hygiene promotion works evolves changing habitual practices. Keeping this in mind, BRAC formed VWCs in the community to empower the community to enhance and further improve the hygiene situation in an integrated manner. The VWCs have combined different types of actions, approaches and different channels to reach out to the whole community with the appropriate hygiene messages. Through the WASH Programme, the key lesson learnt is that any knowledge and awareness building interventions needs to adopt a community approach in order to ensure community participation and yield maximum results. Hence, BRAC has adopted this community participation approach by setting

up VWCs in each village. Evidences show that unsafe hygiene behaviours can be changed through a community approach and scrutiny. Various steps have been taken to stimulate improved behaviours with the close cooperation and coordination with VWC. Thus, we hope by the end of the intervention or the programme all the targets will be met and surpassed. In order to see the impact and change in practice research will be undertaken at the end of 2010.

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