Changing behaviours to improve sanitation and hygiene:
BCC approach and experience in Khulna
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Abbreviations

**BCC** : Behaviour Change Communication

**CWISE** : Citywide Inclusive Sanitation Engagement

**FSM** : Faecal Sludge Management

**KCC** : Khulna City Corporation

**LGI** : Local Government Institutions

**SDG** : Sustainable Development Goal

**SNV** : Netherlands Development Organisation

**USHHD** : Urban Sanitation & Hygiene for Health and Development

**WASH** : Water, Sanitation and Hygiene
Preface

This compendium describes and summarises the work done by SNV Netherlands Development Organisation in the area of Water, Sanitation and Hygiene — specifically on awareness and Behavioural Change Communication (BCC).

Firstly, SNV’s work in Bangladesh is introduced along with its theory of change for BCC interventions and the systematic process followed for evidence-based campaign design. Later, one of the initiatives conducted in Khulna City Corporation is used to illustrate the importance of BCC and its impact.
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Introduction

Bangladesh

In some of the world’s fastest developing cities, the bulk of human waste is dumped untreated in local waterways, on marginal land or in open drains close to people’s houses. It pollutes the environment and poses health risks to local communities.

In Bangladesh, open defecation has been reduced from 18% to <1% between 2000 and 2017. Also, 48.23% (2017) of the 59 million urban residents have at least basic sanitation¹ —latrines or septic tanks, not shared. Yet, the vast majority of waste still goes untreated, which contributes to increasing contamination of groundwater reserves, already affected by salinity, arsenic and industrial chemical waste.

SNV

SNV Netherlands Development Organisation has been active in Bangladesh since 2006. Through impact-oriented and future scalable programmes, SNV supports people to access and develop the capabilities, services and opportunities needed to live a fulfilling life, while sustainably using the natural resources they depend on.

Because of Bangladesh’s rapid urbanisation and deterioration of the urban environment, SNV’s programme focus on Sanitation and Hygiene in strategic urban centres. Since 2014, SNV implements its Urban Sanitation and Hygiene interventions mostly in Southern Bangladesh across six cities.

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¹ JMP website. washdata.org
Cities where we work

- Gazipur
- Kushtia
- Jhenaidah
- Benapole
- Jashore
- Khulna
Urban Sanitation & Hygiene for Health and Development (USHHD) is SNV’s approach to realising citywide inclusive sanitation services for all.

We work with the city authorities, utilities, private sector, civil society and rights holder groups to realise financially viable and safely managed sanitation services that leave no one behind. To address the needs of diverse populations, we guide stakeholders through a process of informed choice regarding technologies, finance strategies, regulation and service delivery models. We facilitate discussion on the trade-offs linked to choices, in particular giving special attention to low-income groups and slum residents.

Working with the private sector, we develop financially viable, sustainable business models for the treatment, re-use and safe disposal of human waste, and we work with communities on service models that are safe and affordable.

Our USHHD approach is a bid for systems change that consists of five components. Three components strengthen the sanitation value chain from the customers (BCC and awareness) and service providers (safe and affordable services, and safe treatment, disposal, and re-use). Two enable authorities to institutionalise the regulations (WASH governance regulations and enforcement) and set healthy financing arrangements (smart finance and investment) in place.
Behaviour change communication and awareness

A change in user’s behaviour is the key to a large-scale transformation in urban sanitation. Behaviour Change Communication (BCC) work for change users’ behaviour and create demand for services. The local contexts, the different groups’ needs, the range of behaviours involved, and their interconnectedness make the BCC complex.

We strengthen the capacities of authorities and sanitation promoters to design, institutionalise, and carry out BCC and awareness strategies that are effective, sustainable,
and tailored to diverse population segments within cities.

In short, BCC is used as a communication strategy to promote positive health outcomes.

In Bangladesh, changing urban sanitation behaviour is exceedingly complex, given the stigma commonly associated with the topic. Urban inhabitants often have grown accustomed to the status quo and, in some cases, even have vested interests in maintaining it.

Through BCC interventions, SNV aims to reach consumers to:

- influence citizen’s awareness;
- increase consumer demand and willingness to pay for safe services;
- promote specific individual hygiene behaviours.

Two specifics of SNV’s approach of BCC stand out: it is evidence-based; and it focuses on the capacity development of the Local Government Institutions (LGI). SNV measures and analyses its interventions continually and redesigns them, if necessary.

We support creating consumer demand and facilitating FSM services, to ultimately institutionalise its activities within the local government.

Baseline Study on sanitation and hygiene at Benapole Municipality, found that almost 20% households are using unimproved toilet. This means that flies have access to toilet and contact with faeces. A significant number of toilets don’t have waterseal in low-income areas. Under this background, Benapole Municipality has designed and implementing a campaign titled “Poo Fly”.

![Image of Benapole Municipality sanitation campaign]
### Design and implementation of BCC

**Steps for BCC intervention design, implementation and evaluation.**

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### Capacity building, stakeholder engagement and institutionalisation

To strengthen the capacities of authorities to lead the BCC and awareness interventions, a participatory and learning by doing process is followed. In each step, relevant employees or departments of city corporations or municipalities are closely involved, along with other local stakeholders based on the behaviour and market segment.

Moreover, SNV arranges training on BCC for relevant officials of LGIs, based on a pre-assessment of their capacities, to build technical capacity regarding behaviour and audience segmentation, formative research, BCC intervention design and implementation. A longer-term vision of professionalising BCC and formalising the internal systems need to be developed by clarifying required efforts and responsibilities. Furthermore, advocacy to city authorities takes place with different initiatives and is mainstreamed across the BCC process.
These initiatives enable individuals, departments and organisations to lead the process of BCC.

**Prioritisation of behaviour**

Evidence-based BCC starts identifying the range of behaviours based on the findings of the baseline study. In consultation with relevant departments of LGIs and other stakeholders, and through a deep dive analysis, behaviours are prioritised based on their situation, relevance and availability of services.

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**Role of behavioural determinants in relation to changing behaviour**

- **Old behaviour**
- **Behavioural determinants**
- **Change behaviour (or practice)**

*For Example:*

- **Barriers or Drivers**
- **Knowledge and Skills**
- **Social Norms**
- **Values**
- **Enforcement**
- **Priorities**

*Source: Behaviour change communication guidelines, SNV, 2016*
Formative research

With the selected behaviour/s, we conduct formative research to understand how people think and feel and what motivates them to practice or not practice a behaviour. These factors are known as ‘behavioural determinants’ that influence the behaviour, and are used to bring about the desired behaviour change.

Different approaches are used to understand behavioural determinants. Since 2016, SNV has used SaniFOAM as the primary framework. It categorizes sanitation behavioural determinants under three headings: 1) Opportunity: Does the individual have the chance to perform the behaviour? 2) Ability: Is the individual capable of performing the behaviour? 3) Motivation: Does the individual want to perform the behaviour?

Evo-Eco framework was used for sanitation behaviour as well. It is based on the insight that our brains have evolved to provide adaptive behavioural responses to rapidly changing or complex environmental conditions. The Evo-Eco model is comprised of three basic components: 1) the environment, which presents a challenge or opportunity to the individual; 2) the brain, which produces potential responses to that challenge; and 3) the body, which engages in interactions with the environment (i.e., produces behaviour) that changes that environment.

For handwashing behaviour, we have also used Barrier Analysis (BA) approach, developed as part of the Designing Behaviour Change (DBC) framework. It is a rapid assessment tool that uses a doer/non-doer approach in order to identify the motivating and hindering factors of the target group.
BCC strategy

The BCC strategy is part of a more comprehensive and city-wise sanitation planning process. It aims to improve the quality and effectiveness of the campaigns. It includes the shared vision regarding BCC, how the strategy links to the overall sanitation planning, reasons behind the selected key behaviours, outcomes of the formative research and the identified determinants/motivators, adjustments/improvements that will be made to BCC, implementation, and monitoring plan, roles and responsibilities, etc. As it is based on the local context, it is unique to each city. This strategy must always be approved by the city council.

Campaign design

Developing a creative brief provides a clear explanation of the campaign’s purpose and objectives, describes the problem using supporting data, and identifies the target audience, communication channels and the preferred ‘look and feel’ of the campaign. The creative agency develops 2-3 campaign concepts/ideas and materials considering messages, and delivery channels. Then all the concepts and materials are pre-tested to ensure these are understandable, attractive, acceptable, and persuasive to target groups. Based on the selected concept finalize design of the campaign including activities, messages, materials and channels.

![Campaign Plan Sharing Meeting with Benapole Municipality](image-url)
Implementation and monitoring

LGIs coordinate and ensure quality of the campaign implementation, involving different change agents and linking with ongoing projects. The campaign duration may depend on market segment, intensity, available resources, and other factors, but usually it is planned for 2-3 months. A monitoring plan is designed and followed by the BCC lead and working group, to ensure a close look into the implementation of the campaign to ensure the reach of the expected results.

Evaluation and re-design

The expectation of this step is to troubleshoot bottlenecks in the BCC strategy, campaign design, implementation. Evaluation is conducted at different levels. An effectiveness study looks at outreach, communication, and achieved knowledge, which helps revise the campaign design in terms of media, message, channels, etc. To understand whether people have changed their behaviour or not, an annual monitoring survey measures the impacts on practice and demand creation. At the same time, an outcome assessment on local authorities’ capacities helps identify the gaps for improving BCC institutionalisation.

The findings on the campaign’s effectiveness, impacts on behaviour changes and demand, and the identified gaps and weaknesses during its implementation by authorities enable an adaptation and improvement of the overall BCC process, strategy, and campaign redesign.
Empty your septic tank, once a year!

BCC intervention by Khulna City Corporation

Khulna City Corporation designed and implemented a BCC intervention from 2017 with support from SNV, under Faecal Sludge Management (FSM)\(^2\) project and later City-wide Inclusive Sanitation Engagement (CWISE) project, with support from Bill & Melinda Gates Foundation.

Being the fifth largest city in Bangladesh with 45.65 km\(^2\) of area and around 1.2 million inhabitants, it accumulates yearly about 145,000 m\(^3\) of faecal sludge, which needs to be emptied, transported, and safely treated. Fully functional services kick-off in 2016-2017, with new vacutugs and one of the largest treatment plants in the region.

Capacity building, stakeholder engagement and institutionalisation

With consensus from KCC, as implementing partner for the CWISE project, a consultation meeting in participation of relevant officials of KCC was conducted to prepare and plan the BCC process. At the same time, a basic BCC training was organized, while a BCC working group was consisted of city officials, representatives from different market segments, and SNV. The aim was to engage city corporation and other stakeholders in the development process of BCC intervention to enhance their capacity to lead the campaign.

Prioritisation of behaviour

In this step, KCC identified a list of evidence-based significant behaviours from baseline survey findings. In 2017, although open defecation was almost 0% and 69% had improved sanitation facilities (but none environmentally safe), still, 28% of containments were
unimproved facilities, meaning faces can be accessed by humans and animals, or toilets are shared (22%). Moreover, safe and regular emptying of faecal sludge was below 1%.

Out of six primarily significant behaviours, three behaviours were selected:

- **Behaviour 1:** Use/uptake of regular safe services for the removal of sludge from toilet tanks or pits (mechanical and/or manual).
- **Behaviour 2:** Install and properly operate a twin pit (wet) toilet with Y junction.
- **Behaviour 3:** Pit toilets with containment but broken or missing water seals are made safe (i.e., flies are prevented from entering).

**Formative research**

A formative research/consumer study was conducted to gain deeper insight and identify significant determinants of the three mentioned behaviours. This study followed SaniFOAM framework, with a qualitative method to gather information. Both household and non-household settings were considered in the study.

The research determined that the first behaviour has the most significant potential for positive behaviour change, therefore prioritized. Main gaps where identifies in the emptying of the containments and overall FSM value chain, which was at that moment at an early stage in KCC.

As a barrier, consumers often wait until pits are full and overflowing. This also means that consumers prefer using the faster response of manual emptying over mechanical services such as vacutugs. Costs are another barrier to mechanical emptying. Moreover, knowledge of mechanical emptying services was generally low.

Access, availability, and social norms were the identified drivers which can make a behaviour change for safe and regular emptying. Mechanical emptying services are becoming more common, increasing access and lowering costs. Increased access and availability also increase the visibility of vacutug in daily life, this is likely to create inquiries and discussion among neighbours.

**Market segment and target audience (multipoint approach)**

- **Market Segments**:
  - Planned residential area
  - Unplanned residential area
  - Low income community (Slum)
  - Institutes (School and Health Care Facilities)

- **Audience**:
  - **Primary**: Building Owner and TMC.
  - **Secondary**: tenant, caretaker, users, neighbours, relevant institutes, service providers.
  - **Tertiary**: City authorities as KCC, KDA or KWASA.
**BCC strategy**

The safe and regular emptying behaviours were defined to develop the BCC strategy, based on significant determinants, KCC’s ability and priority, and targeting project goal. During its conceptualisation, the primary, secondary and tertiary audiences were identified for safe emptying. After the analysis of knowledge level and the different market segments, the 3M -messages, media, and material- were developed. This provides the guidance to select the messages media and material to develop for each specific audience. The Strategy also provided the action plan with budget, responsibility, milestones, monitoring, and a number of audiences reached and outcome. Finally, the strategy was finalized and endorsed by KCC for implementation.

**Campaign design**

Based on the Strategy, 4-months long campaign was designed in consultation with relevant officials of KCC and other stakeholders. Different activities were identified in order to reach a maximum number of the target audience. Several campaign concepts and BCC materials were developed to disseminate messages effectively. Locally available media and materials were given priority. All the concepts and materials were pre-tested using qualitative tools. After analysing findings, some materials were revised, and based on the preference of target audience campaign concept was finalised. Basically, these materials and events transferred knowledge, demonstrated mechanical emptying and linking with service providers.
Campaign implementation and monitoring

Involving change agents

Those who act as change agents were engaged in this campaign. Through orientation sessions, consultation meetings, and during campaign implementation, they provided volunteering service. Among them, frontline staff of KCC like health supervisors, Community Development Committee (CDC), and students.

Message development

Based on the insights from the formative research, different messages were linked with different markets and audiences. Among them, the key message of this campaign was: “empty your septic tank, once a year!” accompanied with a logo.

Interactive events and rollout of IPC

Under this campaign, a number of interactive sessions were conducted to reach and transfer knowledge on safe and regular emptying—for example, Pot-show, theatre for development, market-based consultation with the primary audience.

Monitoring of the activities

The BCC working group, formed by officials from the Health and Conservancy departments of KCC, was in charge of the monitoring of the different activities and events. Assigned officials attended each event and assessed the

Celebrity Letters

Posters

Docu. Drama-
The Poo Journey

YouTube views 1,552,801

Table Talker, Stickers, Banner, road placard, Cable TV scroll and more
participants, process, and quality in a checklist form. Moreover, ward councilors issued accomplishment certificates for each event. Regularly, the vendor in charge of the campaign debriefed the working group to identify areas of improvement and plan activities.

**Evaluation and re-design**

An effectiveness study was conducted one year after the campaign. This study looked at communication objectives and the effectiveness of messages and materials. As a result, the campaign reached about 40,000 primary audiences and 400,000 secondary audiences. Moreover, it was found that knowledge has been increased on safe emptying in 80% of the audience. The study also identified the more impactful campaigns: Caravan (65%), Snake Ladder Game (61%), and Celebrity Letter (55%).

Moreover, the Annual Performance Monitoring survey of 2019 found that behaviour has changed and demand increased compared to baseline. Safe and regular emptying increased from less than 1% to 4%; Unimproved sanitation facilities decreased from 28% to 15%, while Environmentally Safe sanitation facilities increased from 0.1% to 12%. Furthermore, the disposal of sludge at the treatment plant tripled from 2017 to 2019.

Finally, an Outcome Assessment with KCC officials in 2020 found an increase in the institutionalisation of BCC within the local government, scoring 1.7 with a benchmark of 2. Although KCC successfully implemented the campaign, yet City Council could not link the BCC activities with the broader city plans. More engagement of other agencies as health or education departments may strengthen the process. Moreover, campaign design may consider other motivators besides health; thus closer look into the formative research is required.

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
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<tr>
<td>Septic Tank never emptied</td>
<td>44% 25%</td>
</tr>
<tr>
<td>Mechanical Emptying</td>
<td>1% 6%</td>
</tr>
<tr>
<td>No idea regarding Vacutug and FSTP</td>
<td>81% 31%</td>
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Lessons learned

Based on the campaign results, effectiveness and impacts, KCC and SNV compiled some lessons to understand what went well and what can be improved, to trigger a faster behaviour change and increase demand for services:

- Stand-alone awareness events do not automatically increase the emptying demand and practices. The safe emptying practices are still far below than expected, which is more linked to service delivery.
- It takes time and effort for city authorities to accept the issue, but once it’s institutionalised the impacts are high. Capacity building is required within city authority to lead and keep the momentum.
• Increasing the emptying demand requires targeted interventions (channels) for different market segments with active engagement of different stakeholders.

• Services with clear processes and transparent pricing help in accepting of the services.

• Enforcement by city authority to disconnect direct pipeline connection from septic tanks outlet to drains may increase demand.

• Schedule desludging and block desludging campaigns may be effective ways to increase demand.

• Use community toilet management committee as an effective channel to perform campaigns in the low-income communities.
SNV emphasises two areas for effective BCC on urban sanitation: evidence-based for contextualised campaigns, and strengthening capacities for institutional embedding.

More attention to formative research is given to identify significant determinants or what motives people to practice or not practice a behaviour. Moreover, it is behaviour centred and contribute to designing appropriate messages and campaign. However, BCC is a long-term methodological process and requires time to get the expected outcome. If 5% change is found after 1st lap of campaign implementation, it indicates that BCC design works out. Similar results were found in KCC.

The effectiveness of the BCC campaign is not only about the quality of the design, but how it is understood and applied in practice. Though the capacity building is crucial. Before, city authorities’ BCC concept was limited to developing the number of materials and disseminating health benefits. Now they understand BCC is a systematic process that uses an in-depth understanding of people’s behaviour to design persuasive communication. This requires interest and active involvement in each step of designing the BCC campaign. However, there are a few challenges including financial and human resources constraints in mainstreaming BCC at local government institutes.

Besides that, a longer-term vision of professionalising BCC and formalising systems is also important. Local authorities realised it and included BCC in their city sanitation plan. In addition, a BCC working group is formed and the focal person is assigned to design and implement the campaigns. Evidence generated from the effectiveness study encouraged them to re-design campaigns for the different target audiences or market segments.

Continuous efforts from local authorities and the support from SNV are contributing to change behaviour, increasing demand for sanitation services and gradually strengthening capacities and formalising this system change.
Marc Pérez Casas
WASH Sector Leader, Bangladesh
mcasas@snv.org

SNV Netherlands Development Organisation
Bangladesh Country Office:
House 11, Road 72, Gulshan 2, Dhaka 1212
Phone: +880 2 2222 88708-9; +880 2 2222 88984
Email: bangladesh@snv.org
Website: www.snv.org/country/bangladesh

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