

DIGNIFYING SANITATION SERVICES FOR THE ROHINGYA REFUGEES IN COX'S BAZAR CAMPS

Biogas sanitation and cooking facilities proved largely appropriate to respond to the needs of the Rohingya refugees in Cox's Bazar in Bangladesh. Operationalising a full-chain sanitation service would contribute to transition towards longer-term solutions. Our authors determine the challenges arising in a crisis lasting longer than expected.

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The biogas plants consist of a biogas reactor, a hydraulic chamber and a slurry pit.

Photo: Patrick Rohr

In late August 2017, 730,000 Rohingya refugees fled from the mass atrocity crimes including arson, mass killings and gang rapes in Rakhine state, Myanmar, which the UN and human rights organisations classified as an ethnic cleansing campaign. The rapid influx to the neighbouring Cox's Bazar district in Bangladesh put an overwhelming pressure on natural resources and basic services. The government of Bangladesh appointed largely hilly sites, prone to flooding and erosion, for temporary settlements with only a two to three-month action plan in mind, hoping that the population would return.

With clear instructions to install only temporary constructions, humanitarian actors were requested to answer the needs of the popu-

lation in the most effective way, prioritising life-saving needs. The official WASH sector strategy for Rohingya influx urgently requested actors “to provide kitchen, handwashing and sanitation facilities for clusters of families living in makeshift houses to establish normalcy and create safe communal spaces” (see Box on page 33). Installation of emergency latrines along with other WASH and shelter-related infrastructure in already existing camps and rapidly expanding makeshifts resulted in significant deforestation, destruction of wildlife habitat, and depletion and contamination of groundwater.

Already traumatised women and girls experienced growing harassment and violence on the way to collect firewood. Various respiratory diseases also skyrocketed due to the small

cooking space and constant exposure to the wood and charcoal smoke.

THE EARLY RESPONSE – BIOGAS SANITATION AND COOKING FACILITIES

In 2018, Helvetas Swiss Intercooperation and its local implementing partner organisation NGO Forum, installed forty latrine blocks of five to eight cabins, each connected to twelve sets of biogas plants with a kitchen. The biogas plants consist of a biogas reactor, a hydraulic chamber and a slurry pit. The technical solution was suggested by NGO Forum based on its positive experience in other neighbouring Rohingya camps in previous years. Another

reason to select this technology was its potential to contribute to reducing environmental degradation, safety threats to women and girls as well as time and costs involved in the frequent collection of firewood. To avoid risks of conflicts, kitchen beneficiaries were selected through a community participation process, giving priority to widows and female-headed households. Hygiene promoters and kitchen volunteers conducted awareness raising activities to ensure proper use of the facilities. Selected users were trained and hired as latrine cleaners and biogas tank pit emptiers. Additionally, the community was equipped with tools and trained in carrying out small repairs. Finally, the sanitation and cooking facilities were handed over to the government appointee in charge of the camp, the WASH Focal Point Agency, and the community.

A ROBUST AND ENVIRONMENTALLY FRIENDLY TECHNOLOGY

Users, especially women, responded very positively to the new facilities. They appreciate the latrines because they offer privacy (all latrine units can be locked) and safety (two latrine units in each block are equipped with solar-powered light), and are easily accessible. Kitchen users appreciate the fact that no smoke is emitted when cooking. Finally, light also enhances safety at night.

Biogas production helps to reduce the need for firewood. This is of high added value given the negative impact of wood cutting and use of firewood (risk of harassment, erosion and smoke emission when cooking). This, however, needs to be assessed in view of the current strategy of the United Nations High Commissioner for Refugees and the International Organization for Migration to distribute liquid petroleum gas (LPG). Based on discussions with the Rohingya population, the quantity of LPG distributed does not cover their needs; additional availability of gas for cooking thanks to the biogas sanitation facilities is therefore appreciated. Moreover, whether LPG distribution is a long-term sustainable strategy remains to be seen.

Additionally, sludge digestion in the biogas tank greatly facilitates further sludge treatment, for example on a drying bed. Sludge from other on-site sanitation facilities is much more difficult to treat (because of different dewatering characteristics). Given the challenge of improving the faecal sludge treatment efficiency in the camps, this advantage is considerable. The weak points are the larger space requirement characterising the biogas tank

INCLUSIVE SANITATION IN COX'S BAZAR: KEY PRINCIPLES OF THE SECTOR STRATEGY

The WASH Sector identified four guiding principles to promote a more inclusive strategy. This should support a better consideration of the different needs and barriers that the targeted population is facing and thus help avoid negative effects of the humanitarian interventions on their health, dignity, safety and quality of life.

Principle 1 – Put gender and inclusion at the centre of the Government and WASH Sector's interventions by recognising that different people face different barriers to exercise their equal rights to live in safety and with dignity

Principle 2 – Listen to and consult with recognised groups such as representatives of the community (women, disabled persons, etc.)

Principle 3 – Prioritise those who face most difficulties in fulfilling their WASH needs

Principle 4 – Improve effectiveness through increasing knowledge, capacity, commitment and confidence

technology, which makes it less appropriate in the denser parts of the camps, and the higher investment cost in comparison to on-site sanitation options. However, the issue of space requirement and cost need to be assessed considering the entire sanitation chain from toilet to sludge reuse or disposal.

The biogas sanitation and cooking facilities and the implementation of the scheme are therefore assessed as largely appropriate for responding to the needs of the population. However, a few adaptations could further enhance its appropriateness. Given the urgent need for bathing facilities, in particular for women, the design of the latrines could be adapted by adding one bathing unit in each latrine block. A space to dry menstrual hygiene items would allow better consideration of women's needs in terms of menstrual hygiene management. Moreover, one latrine unit per block could be designed as a child-friendly latrine.

A MODEL CONDUCIVE TO SUSTAINABILITY?

The following elements of the biogas sanitation and cooking model (including technical, institutional, and financial aspects) are conducive to sustainability. The facilities (biogas latrines, biogas tanks, kitchen) are of relatively robust quality and could last several years if they are well maintained. The users, mainly the latrine cleaners and biogas tank emptiers, have been trained not only to ensure latrine maintenance and sludge emptying but also to do small repairs. They have thus both – skills and tools – to contribute to functionality.

The official handing over of the facilities to the community and camp management is an important first step. Additionally, the agreement

with a WASH NGO operating a faecal sludge treatment site nearby to ensure de-sludging of the biogas tanks and sludge treatment represents a promising mid-term perspective.

However, a number of challenges remain in terms of ensuring a smooth transition towards effective and sustainable longer-term solutions. Who will be responsible for latrine cleaning, and who will pay for it? How will supply chains, for example of soap or spare parts for the sanitation and cooking facilities, be put in place? How to challenge the traditional governance system to enhance women participation, accountability mechanisms and community ownership? How to reduce risks such as erosion or landslides that could jeopardise the biogas tanks? And how to limit bacteriological contamination and disease outbreaks resulting from inefficient faecal sludge treatment?

CURRENT TRENDS

To address those challenges appropriately, it is important to analyse them in the light of the most recent developments (see Box on page 34). There is a common understanding between humanitarian aid actors that the emergency phase is now over and that it is time to put in place longer-term solutions that help sustain life-saving services and increase the robustness and quality of facilities and services. A stronger focus on enhancing the dignity of the people is needed. This implies not only putting emphasis on protection and gender considerations but also improving livelihoods, for example through skills development and income opportunities. Now the focus is on promoting social cohesion by targeting not only refugees but also host communities. Establishing effective, representative governance is challenging, given the heterogeneous communities in the

camps that has been a result of their displacement, the traditional male-dominated leadership system and prevailing cultural norms and power dynamics. There is a need to sensitively promote leadership and meaningful equal representation of women and girls through inclusion in governance structures and capacity building. Finally, the considerable risks in terms of protection, natural disasters (flooding, landslides) and disease outbreaks urgently need to be addressed.

THE NEXT STEPS TO GO: OPERATIONALISING AND SUSTAINING A FULL CHAIN SANITATION SERVICE

Based on this analysis, Helvetas proposes to tackle these issues by focusing on enhancing dignity, creating perspectives for youth, improving the situation for both refugees and host communities, and reducing risks in parallel.

Nowadays, humanitarian actors usually manage sanitation services directly. The question is therefore how to ensure that local actors such as the local authorities, communities, NGOs and the private sector can gradually play a stronger role in service delivery whereas humanitarian actors gradually transition to a facilitator and coaching role. This would support transition into a municipal, utility or private sector model in the long run. More concretely, the idea is to pilot an intermedi-

CURRENT WASH SECTOR CONTEXT AND TRENDS IN COX'S BAZAR

Access to clean water remains a critical need that has an impact on health and nutrition outcomes. In line with the transition towards longer-term solutions, piped water networks including water treatment are currently in development. Even though most of the underground acquirers are safe, secondary contamination might occur during collection and storage of water. Behaviour change measures targeting improved water quality are therefore key. Many latrines and a number of faecal sludge treatment sites have been built. However, a holistic concept for the entire sanitation chain is still lacking. The new sector strategy will develop minimum standards while taking the entire sanitation chain into account. Besides, it is becoming urgent to address solid waste management. Waste often ends up in open drains resulting in blockages and flooding. There are a number of opportunities linked to solid waste, such as composting, which can be combined with homestead gardening or vegetal stabilisation and tree planting in the camps. There is reportedly a market for recyclables in Cox's Bazar and in the market areas on the road between Cox's Bazar and the camps. Selling of recyclables could provide income generating activities for the refugees and represents a way to link up with the local private sector. Clearly, behaviour change will also be key to putting a functioning solid waste management system in place.

ary service delivery model for sanitation. The intermediary structure would build up on the local authorities (i.e. camp management) and the community through the block committees. This would support the development of a new governance structure that gives a stronger voice to women (each block committee would consist of representatives from the community including 50 per cent women, with a woman either as chair or deputy chair).

Given the limited capacity of the camp management and the fact that the block committees are yet to be developed, this has to be taken into account as a long-term process that will require considerable support by international actors. The local authorities and community would be gradually empowered and involved in operation and maintenance. This would also include improving faecal sludge treatment to reduce the risk of contamination both by upgrading the treatment system and by optimising operation and maintenance. Moreover, solid waste transformation could provide opportunities for skills development and cash. In addition to being used in homestead gardening, compost could possibly be sold to a fertiliser company.

The service provider would additionally promote behaviour change based on identified behaviour change determinants, thus contributing to improving water quality at the point of use, hand-washing with soap, waste segregation and waste composting/recycling. This would help in effectively reducing disease transmission risks and contribute to creating livelihood opportunities. Nutrition messages such as on food hygiene and diet diversity could be integrated in hygiene behaviour change messages. Finally, the intermediary structure would mainstream protection, improve slope stabilisation, and develop community-based contingency plans. Given the rapidity of changes in the context, a phased approach with short (three- to four-month) phases is proposed to pilot this intermediary service delivery model, which would include adaptive planning based on regular monitoring of outcomes and assessment of context and trends.

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Forty latrine blocks of five to eight cabins, each connected to twelve sets of biogas plants with a kitchen, were installed.

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