How can rigorous evidence help to inform Malawi’s national water, sanitation and hygiene strategy?

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The panel commended this high-quality evaluation for generating sound and rigorous evidence on the extent of open defecation-free slippage within Malawi. It further provides quality evidence on the need to focus more on latrine improvements and sustainability in line with market-based sanitation. As a result, the evaluation helped UNICEF and the Government of Malawi to evolve the water, sanitation and hygiene sector strategy across the country.
Over the last two decades, Malawi has achieved remarkable strides in securing basic sanitation and hygiene services. This national progress, however, masks great variation across the country and within communities: open defecation is still practised by about 1 million people in Malawi, and 15 million people have no designated handwashing facility. Although impressive gains have been made in building sanitation infrastructure, achievements are threatened by the quality of this construction and the prevalence of diarrhoeal diseases and other waterborne diseases in poorer households. These diseases then multiply, affecting entire communities and contributing to 3,000 under-five deaths in Malawi annually.

In 2007, Malawi pioneered a new approach to ending open defecation as part of its national water, sanitation and hygiene (WASH) strategy. The UNICEF Community-led Total Sanitation (CLTS) and Hygiene programme implemented in Malawi was one of the first large-scale applications by any organization of the CLTS approach. Of the 38 Malawian local authorities that have at some point been declared open defecation-free (ODF), 16 were supported by UNICEF. District councils, with support from non-governmental organizations (NGOs), carried out CLTS activities as part of the programme, which included a training component in building latrines. This 2019 UNICEF evaluation of the CLTS and Hygiene programme — covering its second phase, from 2013 to 2018 — found that it was extremely relevant and had a considerable impact on promoting basic sanitation and hygiene services in Malawi. Programme sustainability, however, depends on inclusiveness, streamlined processes and support for internal partners at all levels.

PURPOSE

Despite the scale and scope of the CLTS and Hygiene programme throughout Malawi, only limited assessments of its impact have been conducted. This evaluation was commissioned to assess programme strengths and weaknesses with the twofold aim of guiding improvement of the UNICEF Malawi Country Programme 2019–2023, and providing evidence to support CLTS and hygiene promotion in Malawi and further afield.

The second phase of the CLTS and Hygiene programme was implemented with support from the UK Department for International Development, European Union and Bill & Melinda Gates Foundation. This evaluation proved timely, given the heavy reliance on external donors by Malawi’s WASH sector and a recent decline in such funding.

APPROACH

An inception mission determined that the evaluation assessment would cover 3 of the 15 Malawian districts where the CLTS and Hygiene programme had been implemented.

A qualitative assessment of 26 questions was carried out, covering criteria under relevance, efficiency, effectiveness, sustainability, gender and human rights, drawing on sources including programme monitoring data, financial data and documents, and semi-structured interviews. Key informant interviews involved government and implementing partners at the national level; government, partners and health surveillance assistants (HSAs) at the district level; and schools, health facilities and community leaders at the community level. The methodology included a rubric scale to classify responses to the evaluation questions.

**BOX 1** WHAT IS COMMUNITY-LED TOTAL SANITATION?

Community-led total sanitation (CLTS) is an innovative way to mobilize communities to eliminate open defecation. Communities are supported to assess the prevalence of open defecation among community members and to determine a course of action to become open defecation-free (ODF).

The success of this approach lies in moving beyond providing for the installation of sanitation and hygiene ‘hardware’ (i.e., putting in place subsidized sanitation infrastructure) to supporting the ‘software’ of community awareness and mobilization for long-term behavioural change. CLTS engages schools and health facilities, disseminating and applying messages about sanitation and hygiene to permanently break the cycle of faecal–oral contamination and disease. Wide-reaching in its impact, and popular and effective across many countries, CLTS has facilitated a move from the construction of latrines for individual households to the creation of ODF villages and districts.
A quantitative component deployed a quasi-experimental difference-in-differences methodology, comparing outcomes for UNICEF programme districts and other districts. Existing secondary data drawn from the Malawi Demographic and Health Survey (2010 and 2015–2016 rounds) were used. The evaluation also sought to verify the extent to which the sample of 50 communities had maintained ODF status 12 to 18 months after being declared such.

**Limitations**
The evaluation was restricted by:

- limited financial data for a reliable value-for-money analysis, and limited gender-disaggregated data
- lack of alignment between UNICEF interventions and government datasets
- problematic comparisons of UNICEF programme districts and non-UNICEF programme districts, as both types of district benefited from programmes run by other organizations
- lack of a mid-term evaluation, meaning respondents were more likely to focus on recent events from the long period of time (2013–2018) under appraisal
- potential bias introduced by the involvement of staff who had previously worked for the UNICEF programme, though efforts were made to correct for this.

**FIGURE 1**
Representation of the difference-in-differences approach

![Representative diagram illustrating the difference-in-differences approach (Source: Hypothetical data; MDHS: Malawi Demographic and Health Survey.)](image-url)
**KEY FINDINGS**

**Inclusive, but not by design**
The evaluation found that the CLTS and Hygiene programme design was both relevant to sanitation and hygiene needs in rural Malawi and aligned with national policy and decentralization of service delivery. The theory of change, however, while plausible, was only developed halfway through the programme and lacked detail.

The CLTS and Hygiene programme is by nature inclusive and oriented towards the more equitable provision of sanitation services. However, the programme had neither developed specific targets for marginalized groups nor built them into monitoring efforts. Further, the programme design did not fully align with UNICEF or government gender policies: the needs of girls, women and the most vulnerable were not adequately considered, and the programme did not produce sufficient evidence that benefits were fairly distributed.

**A rocky road to meeting targets**
The programme faced numerous challenges in Malawi, its decentralized, large-scale approach to implementation resulting in complex and burdensome arrangements for management. As well as duplication in coordination and staff travel, there were delays in the disbursal of funds, particularly as these far exceeded normal budget allocations for districts. Poor performance on the part of some NGOs compounded these inefficiencies.

In many cases, targets and time frames were overambitious, leading to underachievement in those set for schools and for the training of masons in latrine construction. The programme overachieved, however, on core targets related to community sanitation, as measured by the number of communities declared ODF and the number of latrines constructed.

**Gaps in monitoring**
The theory of change specified outcome indicators on sustained latrine and drop-hole cover use, proper handling and disposal of child faeces, sustained handwashing with soap, and communities declared ODF. Since monitoring was designed prior to the theory of change, however, these indicators were overlooked. This meant that the programme’s efficacy in bringing about change could not be assessed, except for its overachievement regarding community sanitation targets.

The evaluation also identified major inconsistencies within UNICEF monitoring data. Programme impact was weakened by late implementation of training for masons in latrine construction, and by shortages of staff and in the capacity of HSAs. Where HSAs expected allowances in addition to their salary, some NGOs made payments conditional on the declaration of ODF status.

**Rapid gains in access across the board**
There were rapid, comparable gains in access to improved sanitation and handwashing facilities across both UNICEF programme districts and other districts. The evaluation found, however, that where UNICEF interventions were particularly intense, results were enhanced. The findings are complicated by an actual rise in the incidence of diarrhoeal diseases, though this is an indicator that is affected by more than just latrine ownership or use. Incidence of diarrhoeal diseases and open defecation rose most among the poorest households in both groups of districts.

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The programme overachieved on core targets related to community sanitation … this should be celebrated as it represents better value for money than was initially envisaged.

— Evaluation report
Maintaining ODF status is difficult, but learning is occurring at many levels

The evaluation found that the CLTS and Hygiene programme had focused successfully on building the capacity of national, district and community institutions to provide sanitation services. The learning component was key, both for the programme and in feeding into national-level review processes for the WASH sector: UNICEF made a strong contribution to sector policy and coordination at the national level. Placing district councils at the centre of service delivery meant that the programme supported decentralization and local capacity building.

The ongoing decline in WASH sector funding anticipated in Malawi limits the sector’s capacity to execute strategies and to restore services following natural disasters such as floods. Of concern is the fact that ODF status had not been sustained in any of the 50 sampled communities at 12 to 18 months after ODF declaration. The evaluation report also expresses concerns about durability of latrines – often built to very basic standards in sandy areas – and low prevalence of handwashing facilities. The overall loss of ODF status masked good progress at the household level, however, with 80 per cent of households possessing latrines at the endline. There was evidence that behaviour change had taken place, with households sharing sanitation facilities.

INFLUENCE ON POLICY AND PROGRAMMING

National and UNICEF strategy

The evaluation provides strong evidence of the extent of the slippage of ODF status in Malawi, and of the need to focus more on latrine improvements and sustainability in line with market-based sanitation approaches. Using the findings, UNICEF Malawi has evolved the focus of its WASH strategy to encompass market-based sanitation (using SanMark), including to optimize the sanitation value chain, in line with the United Nations Sustainable Development Goals. Further, the National Sanitation and Hygiene Technical Committee of the Government of Malawi has initiated discussions with key stakeholders on national ODF protocols.

### TABLE 1
Assessment of programme sustainability risks at the local level

<table>
<thead>
<tr>
<th>DIMENSION</th>
<th>RISK AREA</th>
<th>RISK RATING</th>
</tr>
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<tbody>
<tr>
<td>User/community level</td>
<td>The selected technologies are not fit for purpose or fit for context</td>
<td>Severe</td>
</tr>
<tr>
<td></td>
<td>The construction quality of physical infrastructure is not adequate for sustainability</td>
<td>Moderate</td>
</tr>
<tr>
<td>Institutional</td>
<td>Responsibilities of service users and support organizations are not clearly and appropriately established</td>
<td>Minor</td>
</tr>
<tr>
<td></td>
<td>Service users do not have sufficient capacity (organized, trained and equipped) to undertake key tasks</td>
<td>Severe</td>
</tr>
<tr>
<td>Behavioural</td>
<td>There is evidence that, where constructed, infrastructure is not used (latrine use, adoption of handwashing with soap)</td>
<td>Minor</td>
</tr>
<tr>
<td></td>
<td>There was not substantive continued promotion to consolidate latrine use and the adoption of handwashing with soap</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
**Market-based sanitation**
UNICEF is well placed to pilot and scale up supply-side and market-based approaches that complement the CLTS and Hygiene programme, thereby catalysing changes in social norms while developing local markets to sustain safe latrine use. Incorporating the market-based sanitation approach, as recommended by the evaluation report, will include working with small businesses and introducing low-cost products, or engaging with microfinance institutions to extend credit.

**Inclusion and equity**
The evaluation revealed clear priorities for programmatic action, including a stronger focus on inclusion and equity. The UNICEF WASH Section is currently implementing a sanitation fund model to increase access to sanitation products and services among marginalized individuals.

**Better construction of latrines**
Another of the evaluation recommendations is to focus on the construction of more durable latrines. This will involve disseminating information about latrine pit design, providing early training to masons, and building HSA capacity and traditional leadership around durable construction.

**Streamlining processes**
The experience of the UNICEF CLTS and Hygiene programme highlights the need for more effective, simplified administration. The evaluation suggests reducing the number of districts involved while increasing the scale of implementation, to build momentum behind sanitation and hygiene at the district level. Accordingly, the WASH Section has reduced the number of districts it works in, and is aiming to streamline logistics by working with fewer, larger NGOs. Tracking expenditure to link the theory of change with specific outputs and outcomes will enable value-for-money analyses.

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**BOX 2**
**TOWARDS A STREAMLINED, INCLUSIVE WASH STRATEGY THAT INCORPORATES MARKET-BASED SANITATION**

This high-quality and rigorous evaluation provided evidence and inputs that led to:

- streamlining UNICEF Malawi’s WASH strategy to encompass market-based sanitation to optimize the sanitation value chain, in line with the United Nations Sustainable Development Goals
- initiation of multi-stakeholder dialogues on national ODF protocols
- implementation, by UNICEF, of a sanitation fund model aimed at increasing access to sanitation products and services among marginalized individuals
- a focus on construction of more durable latrines, including dissemination of information about latrine pit design and provision of early training to masons.

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**LOOKING AHEAD**

Despite the anticipated decline in external funding for the country’s WASH sector, the sanitation component of the UNICEF Malawi Country Programme 2019–2023 is expected to provide continued support at the national level to sustain momentum at the local level. This support will focus on ODF monitoring and verification, assisting national task forces in conducting annual reviews, and supporting the Government of Malawi’s sectoral performance reporting.

*Download original report*
Investment in learning was a positive feature of the programme.

– Evaluation report