



Evaluation Brief

Ex-post: Looking at the Chivi WASH Project 4 Years Later

OVERVIEW Four years after the close of the Chivi WASH Project in 2017 in Chivi North, CARE conducted an “ex-post” evaluation in March 2021 to see which aspects of the project, were sustained. The evaluation focused on water, sanitation and hygiene (WASH); specifically: open defecation status, latrine coverage, and access to an improved water source. The evaluation also inquired about attitudes towards leadership roles of women and girls, and whether COVID-19 lockdowns affected water and sanitation services.

92%

of households report accessing drinking water from an improved source

Safe water storage is practiced at 8 times as many households as at baseline in 2014

90%

of household level latrine coverage remained four years after project close

Background

The Chivi WASH Project (CWP)

The project, which ran from 2014-2017, aimed to increase sanitation coverage in schools and communities through the Government of Zimbabwe’s Sanitation Focused Participatory Health and Hygiene Education (SaFPHHE1) strategy. Additional goals were to increase reliable water services, train (primarily) women to repair water pumps and build latrines, create space for women to participate fully on community water committees and in Sanitation Action Groups (to motivate communities to achieve open defecation free status), and to increase the capacity of local government committees on the importance of gender considerations and intentional inclusion. The program’s final evaluation in 2017 underlined the program’s effectiveness in improving health outcomes like reducing (reported) diarrhea, increasing coverage and use of latrines and increasing access to improved water sources. Positive changes in handwashing behavior and safe water storage and reductions in open defecation were also achieved.

Table 1. Select CWP results, Chivi district, Zimbabwe, 2014-2017.

| HH reported variable | Baseline (N=356) % | Endline (N=396) % | % Change |
|--|--------------------|-------------------|----------|
| Drinking water from an improved source | 69 | 94 | (+) 25% |
| Practicing open defecation | 41 | 1 | (-) 40% |
| Having a toilet | 49 | 97 | (+) 48% |
| Diarrhea in last week | 27 | 5 | (-) 22% |
| Safe water storage | 7 | 90 | (+) 83% |

¹ SaFPHHE includes “triggering” a community, as in Community-Led Total Sanitation (CLTS) for households to build their own latrines / toilets.

Methods

In March 2021, CARE conducted an ex-post evaluation of the Chivi WASH project, four years after the end of implementation in Chivi North, to assess the continuity of the project's impacts. The ex-post evaluation received ethical approval from the Health Media Lab (HML) International Review Board (IRB). The study employed a mixed-methods approach, analyzing quantitative and qualitative data collected by enumerators through 315 household (HH) surveys and 49 key informant interviews (KIIs) across 29 CWP villages that were ODF certified in 2017.

Findings

Sanitation

In 2017, the CWP endline reported between 0-1% of sampled HHs using the bush or a field to defecate compared to 7.9% of HHs in March 2021 (baseline was 41%). The CWP endline reported 97% of households having latrines, with this ex-post reporting a small decrease to 93%.

Table 2. Household latrine type, Chivi district, Zimbabwe, March 2021.

| HH Variable | Type | N=315 n | % |
|---|-------------|------------|----|
| What toilet do your HH members usually use? | BVIP | 160 | 51 |
| | uBVIP | 70 | 22 |
| | Pit latrine | 60 | 19 |
| | No facility | 25 | 8 |
| Improved or Unimproved | Improved | 230 | 73 |
| | Unimproved* | 85 | 27 |

*In Zimbabwe pit latrines are considered unimproved options

District-level open-defecation free (ODF) certification data from February 2021 showed that of the villages sampled just 28% (8/29) of those ODF certified in 2017 remained so through 2021. Across all CWP villages, 26% (44/170) of all villages certified as ODF in 2017 remained certified in February 2021 (DWSSC, 2017; DWSSC, 2021). According to interviews with Sanitation Action Group members, Government officials and Village heads, many latrines fell as a result of heavy rains and were not re-built due to

lack of resources, construction materials or motivation.

Households headed by individuals under 40 years of age reported three times higher proportions of open defecation. The analysis also found that HHs headed by women reported three times higher proportions of open defecation (12.2%) compared to households headed by men (4.9%).

More than half (52.1%) of toilets were self-constructed by single households alone, while 44% hired latrine masons. Reported motivations for building toilets included greater awareness from/response to WASH, NGO, donor projects and programs, personal interests including personal hygiene and sanitation, to avoid open defecation, and pressure from the community.

Of those surveyed, 9% of respondents reported not feeling safe, the majority (79%) of these being women. There was a statistically significant difference in perceived safety at night between HHs with and without any latrine (improved or unimproved): those with no latrine were more than five times as likely to feel unsafe toileting at night compared to those with a latrine.

Hygiene

Despite Government of Zimbabwe COVID-19 handwashing campaigns, just 34% of survey respondents reported "always washing their hands with soap." Enumerators observed soap next to a functional handwashing facility (defined as being equipped with water) within 10-15 meters of the toilet in only 2% of households. There was a significant association between presence of a functional handwashing facility and ward ($p=.001$). Enumerators observed the highest levels of households with handwashing facilities equipped with soap and water in ward five (5): 8% compared to 1.9% across the sample. At CWP endline 87% of HHs had handwashing facilities.

Water

Of the 315 households sampled from CWP villages, 79% reported using an improved water source for drinking, compared to about 94% at CWP endline in 2017. Fifty-eight percent of respondents report their main HH water source is always working, and 41% report some level of disfunction. Over 85% of HHs report sufficient quantity of drinking water in the last month.

At baseline in 2014, only 7% of CWP HHs stored their drinking water in a container with a lid, but by endline this figure rose to 90-93%. In 2021, less than 60% of HHs reported practicing this.

Multiple Village Pump Minders (VPMs) mentioned in interviews that lack of access to tools limited their ability to fix boreholes. Additionally, the money earned for making repairs is often insufficient.

Across respondents, 63% reported paying a fee for water services; however, fees are only paid when the borehole breaks down. Of those paying, 86% reported fees as affordable. The mean and median water fee (USD) was \$1.19 and \$1, respectively.

Perceptions on gender roles

Regarding perceptions around girls' rights to education, 97% of respondents agree that "girls should be given equal opportunity to education," however 20% of respondents believe that girls should not attend school when they are menstruating. With respect to women's leadership, 96% of those sampled agreed that women should play leading roles in community WASH projects and 90% agreed that women should be leaders in the community overall.

COVID-19

There appeared to be a very limited impact of COVID-19 on water services, with 3.8% reporting increased demand for water in the community, 2.5% reporting more water being used due to

COVID-19 prevention activities and 4.8% of HHs reported increased difficulty in accessing spare parts for the water point. Other effects mentioned by 42% of HHs was that there were no water point committee meetings.

Conclusions

CWP's integrated approach led to sustained WASH and behavior change across its target population. Its comprehensive design and approach of working with government institutions led to greater access to safe drinking water and of improved latrines while also facilitating increased community ownership over WASH management.

Sanitation

Households that were part of the CWP maintained high levels of improved sanitation use. However, rates of communities receding back to open defecation was over 70%, though it seems that just a few homes, either newly-built ones or homes that had not re-built their latrine after heavy rains were often the reason for OD recidivism. Flooding and heavy rain significantly impacted sanitation infrastructure sustainability, with ultra-poor and vulnerable HHs often unable to recover after these environmental shocks.

Hygiene

Knowledge of critical times for handwashing remained high in March 2021, however despite this there was a lack of handwashing facilities and handwash soap observed at the households.

Water

Access to improved water sources fell 15% from 2017, but still 79% of HHs reported being able to regularly access the water they need from an improved source. Considering the reduction in access to improved water sources and reports of dry boreholes during certain seasons, more HHs need to be practicing water treatment and storage.

Gender roles

Women are represented and have leadership roles on the water point committees. Further

efforts are needed to increase equality and respect, especially for female pump minders.

Recommendations

These recommendations are not officially representative of CARE, but have been extracted as potential areas for future focus or exploration:

- **Zimbabwe needs a “post-ODF” protocol.** For example, many villages are good at becoming ODF, but there is not a clear understanding of how to maintain motivation. This includes the unclear roles of Sanitation Action Group members after ODF is achieved.
- **Consider a “step-wise” recognition reducing open defecation.** Many villages achieved ODF or made huge increases in latrine coverage – but are not ODF certified. Benefits to the health of the community, specifically child growth indicators, can happen with incremental increases in latrine use (Fuller, J. A., & Eisenberg, J. N. (2016). [Herd Protection from Drinking Water, Sanitation, and Hygiene Interventions](#). *The American Journal of Tropical Medicine and Hygiene*, 95(5), 1201–1210. <https://doi.org/10.4269/ajtmh.15-0677>).
- **Sanitation programs need to budget for subsidies for ultra-poor households.** One of the findings was that uBVIP latrines are often not being “upgraded” and the super structure is vulnerable to weather. Ultra-poor HHs are often unable to put resources towards upgrading or rebuilding latrines so subsidizing a limited number of HHs in each community with quality latrines is likely needed. *Note:* The Government should

ensure there are not sanitation programs that give full subsidies to entire communities.

- **Facilitation of bulk purchasing for materials.** It appears there is a need for buying materials in bulk for latrine building (cement, pipes, etc.) to reduce prices and increase accessibility for households.
- **Stockpiling of spare parts for water points.** Many water committees and VPMs mentioned difficulty in paying for transport or finding the spare parts needed. Communities should continue to pay for parts, but the government may need to assist in stockpiling items for purchase at the ward or district.
- **Local leadership and local government budgets need to prioritize sustainability of water, sanitation and hygiene activities – not just new water points.** District Development Coordinators and Rural District Councils should engage local leaders on ways to invest and prioritize in WASH and monitor activities of communities, NGOs and other implementing partners.

Next Steps

The CWP made substantive gains over the three years of its implementation. Although improved water and sanitation coverage did not stay at endline levels, they reduced moderately and did not revert to baseline levels. Next steps for CARE’s research team is to conduct a deeper analysis of potential WASH and community associations or predictions for the sustainability of ODF, latrine coverage, handwashing behavior and water point functionality.