Evaluation Brief

Post Project Sustainability Evaluation of Chivi WASH Project in Zimbabwe

OVERVIEW Four years after the close of the Chivi WASH Project in 2017 CARE conducted an *ex-post* evaluation in March 2021 to assess the sustainability of project outcomes. The evaluation focused on water, sanitation, and hygiene (WASH), specifically: open defecation status (community and household), 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.

79%

of households reported accessing drinking water from an improved source in 2021

Safe water storage is practiced in 8 times as many households in 2021 than in 2014

93%

of households have latrine coverage, in 2021, four years after project close

Background

The Chivi WASH Project (CWP)

The project--implemented in Chivi North District 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 (SaFPHHE[1]) strategy. Additional goals were to increase reliable water services, train (primarily) women to repair water pumps and build latrines, to create space for women to participate fully on community water committees and in Sanitation Action Groups (SAGs) to motivate communities to achieve open defecation free status (ODF), 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 highlighted the program's effectiveness in improving health outcomes like reduced (reported) diarrhea, increased coverage and use of latrines and increased 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 reporting variable	2014 (N=356)	2017 (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, the same as in Community-Led Total Sanitation (CLTS). The triggering process is meant to motivate households to build their own latrines / toilets.

Methods

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

Findings

Sanitation

Eight percent of HHs reported using the bush or a field to defecate, compared to 0-1% at endline and 37-45% at baseline. The vast majority (93%) of HHs reported having latrines, compared to 97% at endline and 48-50% at baseline.

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

	Type	N=315 n	%
Toilet facility used by HH	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

At project end, 170 CWP project villages were certified ODF. As of February 2021, 26% (n=44) remained ODF, compared to 28% among the 29 villages selected for the study (n=8) (Chivi District Government ODF data, February 2021). According to interviews with SAG members, government officials and village heads, heavy rains had destroyed many latrines and latrines were not re-built due to lack of resources, construction materials or motivation.

According to the interviewees, SAGs did not consistently provide support (i.e., follow-up visits and motivation) to CWP communities post-project which may have impacted sustained latrine use.

Households headed by individuals under 40 years of age reported **over** three times higher proportions of open defecation compared to **older** HHs. The analysis also found that HHs headed by women also reported 2.5 times higher proportions of open defecation (12%) compared to HHs headed by men (5%).

Almost half (45%) of toilets were self-constructed by single HHs alone, while 42% hired latrine masons. Motivations for building toilets, either during or after the CWP included greater awareness to WASH, personal interests including personal hygiene and sanitation, to avoid open defecation, and pressure from other community members.

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 a latrine. Those without a latrine were more than five times as likely to report feeling 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 water-equipped handwashing facility within 15 meters of the toilet in only 2% of HHs. There was a significant association between presence of a handwashing facility and ward (p=0.001). Enumerators observed the highest levels of HHs with handwashing facilities equipped with soap and water in ward five (5): 8% compared to 2% across the sample. While this is still low, it may indicate handwashing disparities between wards. In 2017, 87% of HHs had handwashing facilities (mostly tippy taps).

Water

Of the 315 HHs sampled, 79% reported using an improved water source for drinking, compared to about 94% in 2017. Fifty-eight percent (58%) of

respondents reported their main water source is always working, and 41% reported some level of disfunction. Over 85% of HHs reported having enough 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. By endline this figure rose to 90-93%. In 2021, less than 60% of HHs reported practicing this.

During interviews, many Village Pump Meachanics (VPMs) mentioned that a 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 water fee (USD) was $1.19.

Perceptions related to 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.

COVID-19

There appeared to be very limited impact of COVID-19 on water services, with 4% reporting increased demand for water in the community, 3% reporting more water being used due to COVID-19 prevention activities and 5% of HHs reporting increased difficulty in accessing spare parts for water point repairs. Another effect commonly mentioned was that there were no Water Point Committee meetings due to COVID-19 restrictions (42% of households).

Conclusions

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%. Just a few HHs—either newly established or one that had not re-built their latrine after heavy rains—were often the reason for recidivism. Flooding and heavy rain significantly impacted sanitation infrastructure sustainability, with ultra-poor and vulnerable HHs often unable to rebuild afterwards.

Hygiene

Knowledge of critical times for handwashing remained high in March 2021, however there was a lack of handwashing facilities and soap observed at the HHs, limiting consistent practice.

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.

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 mechanics.

Recommendations

Findings were shared at 21 dissemination meetings in Chivi district in November 2021. The below are a combination of recommendations from meeting participants and the CARE evaluation team, based on evaluation results.

- **Zimbabwe needs a "post-ODF" protocol**. Many villages become ODF while programming is active in that community. However, it is unclear how to maintain community motivation and ability to maintain latrines, which contributes significantly to OD. SAGs may be an untapped resource for sustainability. Thus, SAG members' roles

after ODF is achieved require clarification to ensure continued post-project sanitation support. Local enforcement of a "Toilets First" constitution could also increase ODF compliance.

- **Consider a "step-wise" recognition to reducing open defecation.** Many villages achieved ODF or made notable increases in latrine coverage but are not certified ODF, which can be discouraging and cause further recidivism. A non-binary OD reduction status would recognize that health benefits, specifically child growth, can happen with incremental increases in latrine use (Fuller & Eisenberg, 2016).
- **Budget sanitation subsidies for ultra-poor households.** One finding was that government-promoted uBVIP latrines are not being "upgraded" and are vulnerable to weather. The government should consider subsidizing a limited number of HHs in each community with quality ("upgraded") latrines.
- **Handwashing essential for disease reduction.** Future efforts should focus on improving consistent practice at the HH level over improving hygiene knowledge.
- **Facilitation of bulk purchasing for materials.** Some districts are already doing this: There is a need for buying materials in bulk for latrine building (cement, pipes, etc.) to reduce prices and increase accessibility for HHs in remote communities.
- **Stockpiling 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 (as is already done in some districts). Easu access to tools for VPMs is also needed.
- **Local leadership and government budgets should prioritize sustainability of water, sanitation, and hygiene systems – not just the establishment of new water points.** District Development Coordinators and Rural District Councils should engage local leaders on ways to continutally improve WASH systems through monitoring and reporting successes and failures.
- **Consistent promotion of safe water treatment and storage.** Considering the reduction in access to improved water sources and reports of dry boreholes during certain seasons, more HHs should practice water treatment and storage to improve quality for consumption.
- **Expansion of women in WASH.** CWP and other programs have shown the importance of not only involving women in WASH, but also conducting programs that increase their confidence and skills. Women's involvement in WASH and community leadership contributes to sustainability of outcomes.

Next Steps

CWP made substantiative gains during implementation. Although improved water and sanitation coverage were not sustained at endline levels, they did not revert to baseline levels. Next step for CARE's evaluation team is to conduct a deeper analysis of potential WASH and community associations for the sustainability of ODF and water point functionality.

CARE USA
Maria Hinson Tobin
Maria.HinsonTobin@care.org

Kelly Alexander
Kelly.Alexander@care.org

CARE Zimbabwe
Lovemore Mujuru
Lovemore.mujuru@care.org