To Investigate the Integration of Village Savings and Lending and Income Generating Activities with Community Health Clubs as a Model for Improving the Uptake of Latrine Construction

March 2020

Contents

ACRONYMS

AGRITEX:	Agricultural Technical and Extension Services
BVIP:	Blair Ventilated Improved Pit
CBF:	Community Based Facilitators
CHC:	Community Health Clubs
CHC+	Community Health Clubs integrated with VSL & IGA
CNFA:	Cultivating New Frontiers in Agriculture
EHT:	Environmental Health Technician
FGD:	Focus Group Discussions
IGA:	Income Generating Activities
IMC:	International Medical Corps
MOHCC:	Ministry of Health and Child Care
OD:	Open Defaecation
ORAP:	Organization of Rural Associations for Progress
PHHE:	Participatory Health and Hygiene Education
WASH:	Water, Sanitation and Hygiene
USAID:	United States Agency for International Development
VHW:	Village Health Worker
VSL:	Village Savings and Lending

Abstract

The USAID Office of Food for Peace funded Amalima intervention is a seven year development food security activity that aims to improve household food and nutrition security in four district across two provinces, Matabeleland North and Matabeleland South, Zimbabwe. Improved sanitation and Hygiene is increasingly recognized as a critical element to ensure improved nutrition among infants and young children. To facilitate water, sanitation and hygiene behaviour change, Amalima implemented a Community Health Model (CHC) in collaboration with the Ministry of Health and Child Care (MoHCC). CHC members complete a 20 module Participatory Health and Hygiene Education (PHHE) training over an average of 6 months. During implementation, Amalima noted that members faced financial barriers to household latrine construction. CHCs were encouraged to diversity into income generating and village savings and loans activities, although not all decided to pursue this activity. This qualitative study was then undertaken to better understand how and if the integration of VSL and IGA activities with CHCs improved uptake of latrine construction.

Introduction

In 2015, world leaders came together at the United Nations and adopted the 2030 Agenda for Sustainable Development. Sustainable Development Goal (SDG) 6 seeks to 'Ensure availability and sustainable management of water and sanitation for all by 2030'. One of SDG 6 targets is: *By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations***.** Despite progress, billions of people still lack safe water, sanitation and handwashing facilities. While globally, the percentage using safely managed sanitation services increased from 28 per cent in 2000 to 45 per cent in 2017, 673 million people still practiced open defecation in 2017 (WHO 2019).

The Government of Zimbawe has a gender-sensitive Sanitation and Hygiene Policy which aims to create an open defecation free Zimbabwe by 2030 in line with the SDGs. According to the 2019 Zimbabwe Multiple Indicator Cluster Survey 37% of the population used basic sanitation facilities (from 43% in urban settings compared with 34% in rural areas (ZIMSTAT 2019). While universal access to sanitation remains a challenge, Zimbabwe has a history of promoting innovative approaches to safe sanitation improvements. Technologies, including the Ventilated Improved Pit latrine,[1] have increased access to improved sanitation nationwide. Social marketing strategies, such as the Participatory Health and Hygiene Education (PHHE), have facilitated positive behaviour change (Government of Zimbabwe 2017). Community Health Clubs (CHCs) promoting PHHE were first developed and piloted in Zimbabwe in 1995 to facilitate water, sanitation and hygiene (WASH) behaviour change (Waterkeyn 2019) and subsequently adopted into the National Sanitation and Hygiene Policy (Government of Zimbabwe 2017).

Since first utilized in Zimbabwe, CHCs have since been created in a number of countries including Vietnam, Guatemala, Rwanda, Haiti, Burkina Faso, and Uganda (Waterkeyn 2019). A number of studies have

[1] The recommended standard for sanitation in Zimbabwe is a Blair Ventilated Improved Pit (BVIP) latrine which has a brick lined pit **and** a permanent superstructure which is usually constructed with bricks and plastered with cement.

documented how CHCs have influenced behaviour change in Zimbabwe (Waterkeyn 2019). They are also recognized as a cost-effective approach to improving rural sanitation (Waterkeyn and Cairncross 2005). However, to our knowledge, our study is the first study in Zimbabwe to document outcomes related to combining Village Savings and Lending (VSL) and Income Generating Activities (IGA) with CHCs.

Background

In Matabeleland North and South provinces of Zimbabwe, the Amalima program, a United States Agency for International Development (USAID) Office of Food for Peace intervention has been promoting Community Health Clubs (CHC) since 2014. The program is implemented by a consortium of organisations led by Cultivating New Frontiers in Agriculture (the prime organisation), International Medical Corps, The Manoff Group, Organization of Rural Associations for Progress (ORAP), Africare, and Dabane Water Workshops.

The program is implemented in four districts (Bulilima, Mangwe and Gwanda in Matabeleland South and Tsholotsho in Matabeleland North) across the two provinces. The four districts are in agro-ecological[2] regions 4 and 5, which are prone to low rainfall patterns and consequently are largely food and nutrition insecure. Amalima aims to improve household food and nutrition security through three Strategic Objectives: 1) household access to and availability of food improved; 2) community resilience to shocks improved, and 3) nutrition and health among pregnant and lactating women and boys and girls under 2 improved.

International Medical Corps is the technical lead for the third objective, of which activities include implementation of community health clubs (CHCs) to achieve hygiene behaviour change. The Ministry of Health and Child Care (MoHCC) is the key stakeholder for sanitation and hygiene promotion activities in the country. Since 2014, the Amalima program has supported the establishment of 550 CHCs in collaboration with the MoHCC.

A CHC is a community based organisation made up of community members dedicated to improving the health and welfare of the community through common knowledge, common understanding and the practice of safe hygiene in the home leading to common unity

KEY FEATURES OF THE AMALIMA CHC APPROACH

- CHC approach is endorsed by National policy. Ministry of Health is fully involved (EHTs and Village Health Workers)
- CHC sessions are participatory and led by a trained CBF (Village Health Worker)
- CBFs use context and culturally appropriate materials in the local language – a CHC manual and PHHE Toolkit for guided sessions
- 20 sessions are conducted over 6 months and are held on a weekly to bi-weekly basis
- CHC participants adopt recommended hygiene practices as part of the learning
- Group cohesion is reinforced through a culture of learning together and the objective of improving community hygiene
- No subsidies are given for latrine construction
- CHC members graduate (community wide ceremony/event) and receive certificates upon completion of the PHHE sessions and construction of hygiene enabling facilities (such as rubbish pits)
- Graduated CHCs choose whether or not to embark on VSL or IGA activity with the objective of financing latrine construction & other hygiene improvements

[2]Zimbabwe is divided into 5 agro-ecological regions with agro-ecological regions 1 to 3 receiving good rainfall, and favourable for agricultural productivity. Agro-ecological regions 4 and 5 are drought prone, and receive low levels of rainfall, and are unsuitable for agricultural productivity.

and common welfare. CHC membership is freely open to all community members. The CHC meets weekly to bi-weekly for at least 6 months covering participatory health and hygiene education sessions to promote recommended hygiene practices and around adoption of recommended WASH practices

This approach aims to support the uptake of key water, sanitation and hygiene (WASH) behaviour through Participatory Health and Hygiene Education (PHHE)[3,·] This fosters learning for change through promotion and adoption of recommended WASH practices at household and community level. The CHC model recognizes that knowledge is necessary for behaviour change, however, this is not sufficient and social pressure, support, and action are needed to support individuals to change their behaviours (Devine, J, 2009).

CHCs consist of groups of 15-30 community members that are led by a trained Village Health Worker, also known as a Community Based Facilitator (CBF). Over an average of a six month period, community members regularly meet together with the CBFs to complete a 20 module Participatory Health and Hygiene Education (PHHE) training. Groups meet once a week or bi-weekly. The PHHE curriculum covers topics such as safe handling and storage of water sources, community mobilization, skin diseases, diarrhoea, menstrual hygiene management, malaria, and hand hygiene. These lessons also include promoted practical improvements or hygiene enabling facilities at the household level include constructing latrines, "tippy tap" hand washing stations and rubbish pits. The MOHCC Environmental Health Technicians (EHT) support the CBFs to conduct participatory sessions with CHC members.

Upon completion of the PHHE training, the CHC focus shifts to practical actions and improvements at both household and village level (e.g. washing hands at critical times, constructing latrines, "tippy tap" hand washing stations, and rubbish pits) as well as leading behavior change activities at the community level. In the Amalima project area, PHHE messaging is reinforced through additional Social Behaviour Change channels including drama and skits to reinforce the practice of recommended hygiene practices. During implementation, Amalima recognised a gap in terms of a system approach to finance household latrine construction. To address this gap, CHC members were encouraged[4] to diversify into Village Savings and Lending (VSL) and Income Generating Activities (IGA). This encouragement was done by each CHC undertaking a guided session to discuss the CHC's plans after graduation. This included a discussion on exploring potential IGA and VSL activities that the CHC group could embark on. CHCs then decided as a group on what activity, if any, they wanted to embark on. CHCs that decided to embark on VSL or an IGA activity, then received training on the VSL modules or IGA from Amalima. No other resources or input was given

To date, 28% of CHCs on the Amalima program have diversified into VSL and IGAs such as small livestock and horticultural activities. It is against this background that Amalima noted that some groups were using VSL and IGAs to improve sanitation access. Therefore, this study undertook an investigation on the

[3] Outline PHHE curricular CHCs conduct weekly sessions for a period of 4-8 months using visual aids (PHHE tool kits) and conducting practical's, putting up hygiene enabling facilities and then graduations.

[4] Each CHC undertook a guided session to discuss the CHC's plans after graduation. This included a discussion on Village Savings and Lending and income generating activities (IGA) that the CHC could embark on. Those CHCs that were willing to embark on these activities received the required technical support from the program

integration of VSL and IGA with CHCs to determine if this is a feasible model for improving the latrine construction in the Amalima programming districts of Zimbabwe.

Findings from the study will inform future USAID Food for Peace Development Food Security Activities, and other community WASH programs. For instance, if the VSL and IGA activities demonstrate that they were successfully used as a financing mechanism for latrine construction – future programs will promote CHCs with core VSL and / or IGA activities as part of the activity. Recommendations can made to have VSL or IGA activities integrated as a core part of CHC curriculum as this will help community health club members to finance construction of latrines.

Research Objectives

The primary objective of the qualitative research was to investigate the integration of VSL and with CHCs as a model for improving the uptake of latrine construction.

Research Questions

The specific research questions for the study are outlined below:

- Do CHCs integrating VSL and IGAs have an improved uptake of latrine construction compared to CHC's without integration?
- What motivates (motivating factors) standard CHCs and CHCs+ to construct latrines?
- What limits standard CHCs and CHC+ to construct latrines?

Methodology

Study Area

The research was conducted in two districts (Mangwe in Matabeleland South province and Tsholotsho in Matabeleland North province) across 4 purposively selected villages. CHCs are being implemented across all the program districts. Tsholotsho district was selected a district of choice as it's the only program district in Matabeleland North, and Mangwe district was randomly selected from the three program districts in Matabeleland South.

Approach

The study employed qualitative research methods including Focus Group Discussions (FGD) and key informants interviews (KIIs). Qualitative research methods were selected to gain an in depth understanding of the attitudes, perceptions and beliefs – giving the researchers a rich appreciation of the perceived motivators and barriers for latrine construction (Bourgeault et al 2010). The flexible nature of qualitative research allows greater spontaneity in the interaction between the researcher and study participants (Mack et al 2005).

FGDs were conducted with CHCs that have diversified into VSL/IGAs and CHCs that have not diversified into VSL/IGAs. For the purpose of this report we will refer to these two groups as:

CHCs+: CHCs that have diversified into VSL/IGAs

Standard CHCs: CHCs that have not diversified into VSL/IGAs

Sampling Strategy

The study investigators strategically mobilised women, men, adolescents/youth, the disabled and the elderly to participate in the study for representation from all groups. The sampling strategy was devised to identify key selection criteria to capture the range of variation of the CHCs. The following key criteria was used to strategically select the CHCs for the qualitative assessment:

- When the CHC was formed (to ensure a fair balance of old and new CHCs). The CHCs referred to as "old" were formed in 2014-2016; CHCs formed in 2017-2019 are referred to as "new"
- Membership profile of the CHC – CHCs with mostly women, mixed gender CHCs, CHCs with youth
- CHCs with different livelihood activities (livestock, horticultural, VSL activities)
- Proximity to markets/business centre (CHCs that are far from these amenities, and those close to the amenities)

Study Sample

In totality, the following in depth interviews (IDIs) and focus group discussions (FGDs) were held as shown in Table 1. Full description of the FGDs are found in Annex 1. The FGD sessions were not segregated by gender as males constitute only a small fraction of the CHC members.

	Mangwe district	**Tsholotsho district**	**Total**	**Participants**	**Total number of participants**	**Participant profile information**
FGDs	3	3	6	CHC members participating in VS&L and IGA activities	92	92 Females. Members 'self-select' in forming the group
FGDs	4	3	7	CHC members not participating in VS&L and IGA activities	116	100 Females; 16 Males
IDIs	8	11	19	CBFs, EHTs, Agritex Extension Officers	19	18 Females, 1 male
Observations	1	3	4	CHC member households	4	4 positive deviants that highlight best practices

Table 1: sampled CHCs from Amalima annual outcome monitoring data

Data Collection

Data collection instruments were developed by the Amalima team with input from WASH and qualitative research advisors from the PRO-WASH and IDEAL.

Data was collected by a team of Researchers[5] who have previously conducted similar assessments within the Amalima program areas. The enumerators underwent a two day methods and tool training, which encompassed pre testing. Team members pre-tested semi-structured interview and FGD guides (Annex 2) with a CHC in the Tsholotsho district. Data collection was conducted over a 5 day period in November 2019. During each data collection session, there was a dedicated notetaker. The interviews were recorded in the Ndebele language and then transcribed directly into English for data analysis and reporting. IDIs lasted between 20 to 30 minutes and FGD between 60 minutes to 90 minutes. Observations were conducted in a sample of households of CHC members who have diversified into VSL. Data collected previously as part of the Amalima annual CHC Outcome monitoring quantitative data was also included as part of this study.

Data Analysis and Triangulation

Data was managed in Excel and was coded by themes by IMC analysts. We used content analysis to analyse the data (Hsieh et al 2005). Data from the FDG participants was triangulated with data from key informants who included CBFs, EHTs, and Zimbabwe's Agricultural Technical and Extension Services (Agritex). Amalima annual CHC Outcome monitoring quantitative data was descriptively analysed.

Ethical Considerations

Prior to data collection, the protocol and the data collection tools were reviewed by the Amalima technical Learning unit team, Pro-WASH and IDEAL. Verbal consent was obtained from participants prior to participating in the focus group/interview.

Key Findings

The key findings of this research are presented and interpreted in line with the objectives of this research.

Do CHCs+ have an improved uptake of latrine construction compared to standard CHCs?

The research used the Amalima annual CHC Outcome monitoring quantitative data to answer the above research question**.** Six CHC+ (CHC that have diversified into VSL or IGA activities) and six standard CHCs (CHCs that have not diversified into VSL or IGA activities) were randomly sampled in each of the study districts (Tsholotsho and Mangwe). The sampled wards are in ward 14 and 19 in Tsholotsho district and ward 9 and 15 in Mangwe district.

The key VSL/IGA activities that are being undertaken by CHCs+ include horticulture activities, basket weaving, and livestock rearing. The quantitative data from the Amalima project shows that CHCs+ in Tsholotsho and Mangwe district constructed more latrines than the standard CHCs. Out of 158 CHC+

[5] Amalima program Lead Health and Nutrition Specialist, M&E Coordinator & WASH Coordinator

households that had no latrines before joining CHCs+ at least 59% have constructed and are utilising the latrines whereas out of 160 households of standard CHC members, only 32% have since constructed latrines. The descriptive analysis of the quantitative data indicates that IGA/VSL as a financing mechanism could be contributing to latrine construction for the CHC+ households.

What motivates (motivating factors) CHCs+ to construct latrines?

CHC+ member perspectives from the study showed that CHCs+ did so because they were motivated by financial, social and human and animal health benefits. They wanted to be able to construct latrines, they wanted to be able to buy cattle and pay school fees (for their children) after latrine construction. Importantly, when a CHC already had group cohesion in place, this facilitated them to able to embark on the VSL/IGA activity as a group. All the CHCs+ highlighted that the most key motivating factor for latrine construction was the importance of reducing diseases such as cholera and diarrhoea. A common sentiment was that the knowledge gained from the PHHE sessions gave them an understanding of the need for latrines in order to reduce diseases. Despite the fact that the standard CHCs constructed latrines at a lesser extent - they too cited that disease prevention was a key motivating factor for latrine construction.

One of the push factors which was found to be more prevalent in Tsholotsho was the shame and embarrassment on practising open defecation, which was made more profound by the lack of tree cover which prevented the practice of open defecation. In Tsholotsho, the settlement pattern is such that homesteads are close to each other, and due to deforestation, there is little tree cover. This was noted as a motivating factor among both the standard CHCs and CHCs+ members. Related to the shame and embarrassment was the embarrassment of being seen carrying a hoe, which was glaring evidence to show that one was going to defecate. An elderly standard CHC member from Mangwe cited that *"My child, it's embarrassing to be seen carrying a hoe, everyone will know what you are up to"*. The shame and embarrassment of practising open defecation was heightened in communities in Tsholotsho where some CHC songs sung at CHC meetings and other community gatherings mocked the practise of open defecation. This was prevalent amongst both the standard CHCs and CHCs+. The lyrics of the song used to provoke community members without latrines were as follows: *Neighbour, do not defecate behind your hut and use a log to wipe your behind" (Tsholotsho FGD with CHC+)*

In Mangwe and Tsholotsho, both standard CHC and CHC+ members stated that it was not easy to share a latrine with their neighbours as oftentimes 'derogatory' signage would be written/ inscribed by the latrine such as 'do not mess the toilet' and the one requesting for a latrine felt that the message was derogatory and targeted at her and her household. The desire not to share a latrine was also a push factor for some members to end up constructing latrines.

Another push factor tied to traditional beliefs was that if one practised open defecation, the faecal matter that was left in the open would be used for witchcraft purposes. This was a common belief in Tsholotsho.

A standard CHC member stated the following "*We heard that some people steal faecal matter for rituals for enrichment purposes*[6] *therefore we were motivated to construct latrines".*

Interestingly, across both Mangwe and Tsholotsho, CHC members from both the standard CHCs and CHC+ stated that they were motivated to construct latrines as they did not want their poultry to feed on faecal matter as they (CHC members) eat the chicken intestines as a relish. So, they highlighted that where open defecation is being practised widely, the free range chickens feed on human faecal matter. A CHC member from Tsholotsho said the following *"When will we eat the chicken offals, if you (directed at the neighbour) and your children practise open defecation".* Generally, both the standard CHC and CHC+ cited that when livestock eat human faecal matter they are prone to suffer from measles, and cattle with measles will be condemned at the abattoir. Communities place great value on owning livestock as this is a form of wealth – and therefore the desire to construct latrines is high.

CBF perspectives: From the KII with CBFs, key motivating factors for latrine construction by CHC members were similar to the factors echoed by CHC members in the FGDs. These included the knowledge gained through PHHE on the importance of having a latrine, the fact there are lots of open spaces and little tree cover for open defecation, the challenges that came with sharing of latrines and the shame and embarrassment of not having a latrine which is heightened by CHCs using use of songs to shame the practise of open defecation. In addition, they highlighted the issue of poultry feeding on faecal matter where open defecation is widely practised. Emerging motivating factors included the role played by community leadership in encouraging and even enforcing latrine construction at village level. Another motivating factor is when EHTs are actively supporting the community for example through promoting the 1 bag model (1 bag of cement)[7] latrine and through sanitation triggering to encourage communities to construct latrines. In addition, CBFs cited that social pressure from children in the household who were fascinated by the tippy taps they saw in other homes was a push factor for latrine construction, because the project promoted the tippy taps to be constructed alongside the latrines as a way of promoting handwashing after latrine use.

EHT and Agritex Officers perspectives: The findings from the KIIs with EHTs and Agritex highlighted that the knowledge gained from PHHE for example diarrhoea prevention led communities to realise the importance of having a latrine. Interestingly, they highlighted that the zeal to participate in CHC competitions and have a model home was a key motivating factor. As similarly echoed by the CBFs, the role played by local leadership in being in the forefront of latrine construction, and enforcing the construction of latrines especially for new homesteads being set up in the villages to prioritise first the construction of a latrine, before constructing other structures in the homestead. In addition, the support from EHTs and other extension workers when they conduct home visits put some form of 'social pressure' on CHC members to construct latrines.

[6] Can be used by people through witchcraft to get rich.

[7] An upgradeable BVIP which is constructed using 1 bag of cement. It has a pit lining and slab, and other materials such as grass/thatching or plastic sheeting can be used for the superstructure

The only key difference identified in motivating factors for latrine construction between CHCs+ and standard CHCs was that the CHCs+ had 'access to money' from VSL and/or IGA activities that was commonly cited as a motivating factor.

What made it easy for CHCs+ and standard CHCs to construct latrines?

For both groups, the availability of locally available material such as pit sand and river sands which communities access freely in their locality was a key enabling factor for latrine construction. In addition, both groups cited that having a local builder from the area made it easy for them to construct latrines.

WHAT MADE IT EASY FOR CHCS+ TO CONSTRUCT LATRINES?

- Financing from VSL
- Availability of cement at local markets
- Working as a group and helping each other (group cohesion)
- Availability of skilled builders within the community
- Easy access to locally available resources such as river sand
- Easy access to a soil type that could be molded into bricks

Both groups highlighted that 'helping each other' in activities such as brick moulding was an enabling factor in latrine construction. However, this sentiment was echoed more strongly amongst CHCs+. Perceived group cohesion was stronger amongst the CHCs+ as they cited that there was a 'spirit of supporting each other'.

Some CHC+ members stated that they get help from their husbands in the actual latrine construction, as the men provide labour. The CBFs with support from EHTs and community leadership can look at strategies such as ball games to engage the men, as their involvement is key:

> *Introduce ball games for men so that they can attend lessons. Make men aware of the IGAs which can also help them get money to support their families. Frequency of lessons to be reduced during the farming season.* (CBF A).

The key differences that the researchers found between CHCs+ and standard CHCs is that access to finance from VSL / IGA made it easier for CHC+ members for them to construct latrines. The standard CHCs mostly indicated that access to remittances from family members and sometimes donations (from other NGOs) had made it easy for them to construct latrines. The availability of cement at local shops and close proximity to markets made it easy for the CHCs to construct latrines. However, CHCs+ had greater access to cement because of the VSL component.

In Mangwe, CHCs highlighted strongly that easy proximity to Botswana where cement is much cheaper than local prices made it easy for them to construct latrines. CBFS, EHTs and Agritex Officers echoed similar sentiments to CHC members in the FGDs on what facilitates latrine construction. This included citing mostly that availability of locally available resources (such as pit sand, river sand), availability of cement from local markets, VSL proceeds, collective action where CHC members help each other, and the support from EHTs Extension officers cited the following:

They can make their own bricks to build the latrines because they can easily get river sand. Also, in some areas they get easily get water to help them build the latrines. (EHT A).

Helping each other as a group to collect raw materials (Sand from Gwayi river, water from Gwayi river and VS&L to buy cement.) (EHT A).

They make their own bricks using locally available material (river sand). Raise money through VS&L to buy cement. (AGRITEX officers 1).

VS&L and IGAs can make it easier for the people to buy cement helping them construct their latrines. (AGRITEX officers 2).

What limits standard CHCs that have graduated to construct latrines?

LIMITING FACTORS TO LATRINE CONSTRUCTION

- Lack of cement
- Lack of cash to purchase cement and/or to pay builders
- Lack of water (for brick making)
- 'Lack of local leadership' enforcing the building of latrines by communities
- Behaviour change challenges

CHC member perspectives: The study findings showed that key limiting factors included the lack of cement with some CHC members highlighting that the prices of cement have gone up and they (the members of the CHC) cannot afford to purchase cement. From the four FGDs with the standard CHCs overwhelmingly reported that the 'lack of cash' to purchase cement and/or to pay builders was highlighted strongly as the key limiting factor. One of the standard CHC group members went on to highlight the following '*those in VSL are always ahead and cash is not a problem for them*'. The CHC members specifically highlighted the below relating to cash crisis:

- *Lack of financial capital for projects to sustain us and our families/households.*
- *The Zimbabwe economic situation is hindering us from constructing latrines, thus, we spend most of the money on food not Latrines because of the drought.*

The standard CHC members also highlighted that the lack of water for brick making is a limiting factor as water is needed to construct latrines, this is not surprising given that Tsholotsho and Mangwe district are drought prone, and have dire water challenges, this impacts negatively on the construction of latrines. The CHC member further emphasised this by saying "*Some members miss meetings because they spend most of the time waiting in long {water} queues. We face water shortages for domestic use and for our livestock".* In terms of material for constructing the latrines most of the CHC+ members who had constructed latrines indicated that the key challenges they faced were more to do with procurement of cement, for instance a CHC member highlighted the following *"We were buying building material bit by bit until it was enough." A*nd in terms of distance, *"it is far where we buy the cement".*

CBF perspective: According to the KII with CBFs, it was notable that the lack of finance or cash to purchase cement for latrine construction was the prime limiting factor for standard CHCs. CBFs highlighted that the limiting factors were linked to the high levels of poverty, and that this affected more the elderly standard CHC members who lacked money. Laziness and the water scarcity challenge were also cited as limiting factors to latrine construction. The CBFs cited that
"Some {members} do not have latrines and also do not have the money to buy cement for building the latrines (especially the aged) then they end up not attending lessons because they know it might be hard for them to construct the latrines. (CBF B)".

Environmental Health Technician and Agritex Officer Perspectives: The EHTs and Agritex Officers relayed similar sentiments to what the standard CHC members and CBFs relayed in highlighting that lack of finances was a key limiting factor for CHC members to construct latrines. An EHT cited "*Some are very poor and have no source of income. People who help with the finances at home are not always around* (EHT 4)." In addition, an EHT stated that '*The turnaround of the economy has changed a lot to the community members. It has been a great challenge for example, people cannot buy a bag of cement when they do not have mealie-meal in the house. Shade latrine uptake is better because the materials needed to build it are inexpensive and readily available* (EHT 1)."

Interestingly, CBFs, EHT and Agritex Officers all agreed that there was a 'lack of local leadership' enforcing the building of latrines by communities. In addition, it was cited by EHTs that there was a behaviour change challenge:

> *"Behaviour change is a process at they have not reached that stage where they see the importance of building latrines. Some are just resistant and some are just lazy* (EHT 2)".

Benefits of VSL/IGA to CHCs

CHC member perspectives: Most of the CHCs+ members revealed that VSL/ IGAs were playing a big role in providing them with the finances or income to procure cement to construct latrines, and for livelihood activities. One CHC+ member cited "*To a greater extent, VSL helped as I used the money to buy some of the stuff that I needed to construct a latrine. And we do other small businesses such as those of vegetables, poultry, jiggies (savoury snacks), airtime (mobile phone airtime), soups and we even bake scones."* It was evident that for most CHC+ members, the construction of latrines was the primary objective for them, and that the livelihood related projects were secondary "*It helped those who did not have latrines. You can use the money to buy cement and construct the latrine. Some members used money from VSL and others already had the latrines. To a greater extent, we used the money to buy cement and pay the builders*."

EHT/Agritex Officer perspectives: The EHTs corroborated the primary use of VSL and IGA proceeds being used for latrine construction by stating that "*Those in VS&L can buy themselves cement to build their latrines and can also buy livestock and some {buy} kitchen equipment* (EHT 2)". In addition, an Agritex Officer cited that "*The VS&L component is one of the most important driving factors that makes them*

meet, it helps them share ideas and with the little they make in those groups they can buy some of the necessities at home (Agritex Officer 1)".

In comparison, an Agritex Officer stated the following about CHCs+ *"They work together very well and they understand each other more. They can take their children to school and can buy livestock (chickens, goats, donkeys and cows)."*

Should the integration of IGA/VSL be a mandatory part of the CHC training? Why?

CHC member perspectives: All CHC+ members were of the strong opinion that VSL/IGA training should be a mandatory component of the PHHE curriculum. A CHC+ member stated that "*It (VSL/IGA) has helped us achieve our goals; we now have livestock and have managed to construct latrines in our homesteads".* Interestingly, all the standard CHC members were also of the opinion that VSL/IGA training should be a mandatory part of the CHC training. We noted that for the standard CHCs, they cited cash shortages, financial difficulty, poverty and a lack of understanding as the key reasons as to why they had not constructed latrines.

EHT/Agritex Officer/CBFs perspectives: All the EHTs and Agritex Officers perspective relayed that VSL and IGAs training should be a part of the CHC training. An Agritex Officer indicated that "*It should be mandatory so that when they graduate, they will not only be having knowledge on hygiene they would also have all the hygiene enabling facilities because some require money for example, the latrines. So, the IGAs will be the source of finance so that they can buy the cement to build them* (Agritex officer)". "*Yes, because it can help them build latrines* (Agritex officers 2)".

However, one of the EHTs indicated that it was best to train the group on VSL/IGAs after they had completed all the PHHE training for the CHC to ensure that the VSL/IGA activity prioritised latrine construction and hygiene promotion. Interestingly, we noted that the concept of social cohesion or working together was highlighted as key. The CBFs were of the following opinion "*Yes, so that they can help each other build their latrines, buy livestock and other necessities. They shouldn't waste time. For the IGA groups to be functional they should group themselves according to how much they can afford for a given time so that they won't split* (CBF A)".

Social capital: The study researchers observed that some of the CHC groups pooled together funds and followed a rotational system where on a month by month basis, a few members would benefit from receiving money from the pooled fund to construct latrines. This was done for all members in the group without latrines. For those who already had latrines, they used the funds towards IGA activities. These funds were a form of social capital for CHC+ members. Interestingly, a ripple effect of this was the formation of new CHCs, and even the construction of latrines by non-CHC members within the community

Discussion

Community Health Clubs can be vehicle for transformative WASH interventions as the model is more holistic than other mobilization strategies used purely to achieve targets in the WASH Sector such as community led total sanitation (CLTS) or Participatory Hygiene and Sanitation Transformation (PHAST) (Waterkeyn, et al 2020). Across both standard CHCs and CHCs+, we identified number of motivating factors for latrine construction including for financial, animal and human health, and social reasons including to avoid shame and embarrassment. The only key difference in motivating factors for latrine construction between CHCs+ and standard CHCs that the researchers identified was that for CHCs+ the 'access to money' from VSL and /or IGA activities was commonly cited as a motivating factor. It was notable that CHCs that had not embarked on VSL/IGA had a higher dependency on aid, as they tended to rely on remittances or donations to support latrine construction. This is in line with other studies that have shown that while CHCs are recognized as an approach that can facilitate WASH behaviour change, there are a number of limitations that influence their effectiveness. This includes inadequate access to loans for investments in WASH products and/or access to financial resources to support the promoted change (Prottas et al. 2018). Others studies and reviews indicate that the cost is a barrier for procuring materials for WASH improvements (Bongartz, 2016; Ekane et al. 2019 ; Sara et al. 2014).

In line with other studies, our study suggests that where households have a financing mechanism – there is higher latrine construction. Indeed, our study showed that lack of finances to procure cement and pay for builders can often be a barrier to latrine construction. It is evident that for CHCs embarking on VSL, the lending aspect gives all members an opportunity to access funds to construct latrines. Cost of an individual household latrine has been identified as a significant constraint on building a latrine across a number of studies. A global review on factors that influence open defecation and latrine ownership in rural households report that households with the highest incomes are the most likely to construct latrines (O'Connell, 2014). While other factors such as access to markets and products, social norms, self-efficacy, emotional, social and physical drivers to sanitation it is plausible that increasing income though VSL/IGA could improve coverage.

Our study findings also suggest that the CHC approach which integrates VSL or IGA activities results in more households constructing latrines. This is in line with findings from a comparative assessment conducted in Rwanda and Zimbabwe (Waterkeyn et al, 2019), showed that Blair Ventilated Improved Latrine (BVIP) for a household increased by 27% in households participating in CHCs.

CHC members undertaking VSL/IGA activities benefit from the social capital and greater community cohesion (Brooks et al. 2015). The CHCs helped to create unity, stimulate a collective effort among women as they are the key members of the CHCs. For all of the CHCs+, members are self-selected based on trust, reliability and mutual understanding. The cohesion within the groups was therefore generally observed to be greater. For Amalima, the CHC+ members had access to social capital from the rotational funds that were availed to members for latrine construction, VSL and IGA activities.

In this study, we identified CHCs+ established as far back as 2014 that were still actively meeting to undertake VSL activities. This strongly suggests that the VSL/IGA activity may be contributing to sustainability/continuity of the CHC. However, hygiene promotion did not always remain a core component of the group's activities once they graduated and embarked on VSL/IGA activities.

Cultural, traditional and psychosocial factors were observed to play a key role as determinants for latrine construction, as demonstrated in other studies (Ekane et al. 2019). This strongly corroborates with the fact that the CHC approach needs to continue to leverage on community wide behaviour change strategies including the use of edutainment (songs, drama) and story-telling.

The role played by community leadership influenced latrine construction in most communities where community leaders encouraged or enforced community by-laws which promoted latrine construction. Similarly, where government extension workers such as EHTs, and Agritex Officers provided strong support to communities this was a 'push factor' for latrine construction. In a few communities 'social pressure' from the children played a role in latrine construction.

Finally, we can note the importance of including men in the CHC activities as they can support the latrine construction. As concluded from other studies, including more males may make CHCs more effective and help in addressing gender disparities in WASH (Ekane et al. 2019).

Recommendations

As informed by the study findings, we recommend that future hygiene promotion interventions should consider encompassing the VSL/IGA component to finance latrine construction. Additional recommendations are:

For Amalima

1. Share findings from this study with the MoHCC to consider VSL/IGA training to be integrated into the PHHE curricular.

For CBFs

2. Engage husbands to be supportive in latrine construction.
3. Promote the one (1) bag cement model (approved by the National Policy) where there are water scarcity challenges, and where CHCs cite lack of finance as a key limiting factor for latrine construction
4. Include local leadership as part of the CHCs due to the influential role that they have in encouraging or enforcing beneficial community practices.
5. For CHCs+, CBFs should conduct quarterly 'refresher sessions' on hygiene promotion to support behavior change maintenance and ensure this remains one of the key components of the group.

For the Government of Zimbabwe and supporting partners

6. Standardize the training so that the CHC group receives VSL/IGAs training after completion of the PHHE curriculum. This sequencing will support the CHC members to prioritise latrine construction and hygiene promotion as part of their VSL/IGA activity.
7. Integrate the VSL/IGA training into the National PHHE curriculum.
8. Support WASH market strengthening activities to ensure that CHC members are able to procure cement from nearby markets.

Limitations

The program staff supported the researchers in the data collection and the co-authors of this report were actively engaged in the Amalima implementation of the CHC approach, and may not be strictly impartial. However, strong efforts have been made to minimize resultant bias, by using external reviewers (PRO-WASH and Tango International). The presence of program staff during data collection may have influenced the participants' responses by telling them what they think they want to hear (courtesy bias) and produced some social desirability in participants' reports of their experiences with the program activities. The selection of CHCs was not random and not representative of all CHC participants in the project area.

Conclusions

The primary objective of the research was to investigate the integration of VSL and with CHCs as a model for improving the uptake of latrine construction. The study findings show that CHCs integrating VSL and IGAs have an improved uptake of latrine construction compared to CHC's without integration. The only key difference identified in motivating factors for latrine construction between CHCs+ and standard CHCs was that the CHCs+ had 'access to money' from VSL and /or IGA activities that was commonly cited as a motivating factor. Key limiting factors to latrine construction amongst standard CHCs included lack of finance for procurement of inputs such as cement. Overall, the study findings demonstrate that VSL/IGA component has been a financing mechanism for latrine construction. Given this finding, there is great benefit in integrating VSL/IGA training to the CHC approach. However, more research is needed to determine the actual extent to which the VSL/IGA activity is contributing to the sustainability of the community health club. Other areas for future research include determining the extent to which accessibility to markets influences latrine construction.

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Annex 1

Mangwe District	FGD 1 CHC+	FDG 2 - CHC+	FDG3- standard CHC	FDG4- standard CHC
Formation	**2016**	**2016**	**2016**	**2016**
Gender composition	**15 females**	**23 females**	**48 females**	**2 males and 22 females**
Age range of participants	**22-66**	**31-77**	**37-78**	**45-88**
Proximity to the markets	**0-5KM**	**0-5 KM**	**5-10 KM**	**0-5KM**
Livelihoods	**VSL/LIVESTOCK**	**VSL**	**VSL/LIVESTOCK/CA**	**-**

Tsholotsho District	FGD 6 – CHC+	FDG 7 - CHC+	FDG 8- CHC+	FDG 9- standard CHC	FDG 10 – standard CHC
Formation	**2017**	**2017**	**2014**	**2016**	**2015**
Gender composition	**22 females**	**22 females**	**2 males and 35 females**	**3 males and 30 females**	**1 male and 29 females**
Age range of participants	**35-66**	**36-66**	**19-77**	**23-68**	**21-79**
Proximity to the markets	**5- 10KM**	**5- 10KM**	**40 KM**	**40KM**	**5- 10KM**
Livelihoods	**VSL**	**VSL**	**VSL**	**CA**	**-**

1. **Old CHCs that were formed in 2014-2016 (4-Diversified and 3 Non-Diversified)**
2. **New CHCs that were formed 2017-2019 (2 Diversified)**
3. **CHCs that Female only (5 Diversified)**
4. **CHCs that are mixed (1 Diversified and 3 Non-Diversified)**
5. **CHCs with Youths (4 Diversified, 2 Non-Diversified)**
6. **CHCs with Elderly only (1 Diversified ,1 Non –Diversified)**
7. **CHCs (Livelihoods)- 2 Diversified (VSL&LIVESTOCK); 4 Diversified (VS&L);1 Non-Diversified (CA)**
8. **Markets proximity -0-5 KM (2 Diversified, 1 Non-Diversified); 5-10KM (3 Diversified , 1 Non-Diversified); 40KM (1 Diversified , 1 Non-Diversified)**

Annex 2 KII and FGD Guides