Financing sanitation for low-income urban communities

Lessons from CCODE and the Federation in Malawi

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Partner organisation

Centre for Community Organisation and Development (CCODE) is a Malawian affiliate of Slum/Shack Dwellers International. CCODE works in partnership with the Federation of the Rural and Urban Poor Malawi (the Federation).
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Like many other countries in the Global South, Malawi has failed to meet Millennium Development Goal (MDG) targets to improve access to sanitation. It has been estimated that only 25 per cent of the country's population has gained access to improved sanitation since 1990 and access to it is a meagre 41 per cent, according to the latest Joint Monitoring Programme (JMP) Report (2015). By utilising social capital and promoting ecological sanitation, CCODE (an SDI affiliate), has enabled thousands of urban poor households, who could not afford better toilets, to live a dignified life. This study shows that the CCODE model could do this for most of Malawi's urban poor.

Contents

Acronyms

CCODE	Centre for Community Organisation and Development
FGD	focus group discussions
GoM	Government of Malawi
KII	key informant interviews
MFI	Micro finance institution
MIS	management information system
NSP	National Sanitation Policy
Reall	Real Equity for All
SWAp	sector-wide approach
TWG)	Thematic Working Group
VfM	value for money
VIP	ventilated improved pit latrine
WASH	Water, Sanitation and Hygiene
WSP	Water and Sanitation Programme

Summary

Malawi continues to struggle to meet access to improved sanitation targets set globally. It has been estimated that annually the country loses an equivalent of US$ 57 million due to poor sanitation (WSP 2012). The Water and Sanitation Programme (WSP) estimates that almost a quarter of the country's more than 15 million population uses unsanitary or shared latrines, with about 9 per cent having no latrine and practising open defecation. Poor sanitation is said to account for diarrheal-related deaths of 8,800 Malawians every year, including 4,500 children under five (WSP 2012).

The lack of financing for sanitation is recognised as a big barrier to improved sanitation in Malawi, where the 2008 National Sanitation Policy (NSP) discourages subsidies. In 2009, CCODE introduced a special portfolio for sanitation loans to its urban poor revolving fund, to enable households to construct ecological sanitation toilets. Since its establishment, the fund systems and procedures have evolved to respond to demand and improve its performance in sanitation delivery.

By December 2014, CCODE had reached over 30,000 people, with improved ecological sanitation toilets at zero-subsidy. The success of the CCODE sanitation financing model depends on community mobilisation and social awareness and it remains relevant to strengthen the role of the Federation of the Rural and Urban Poor in sanitation delivery. It is important to re-examine the role of the sanitation teams because, while they provided quality checks and balances in the system, they do create some bureaucracy. In addition, external financing agencies should give consideration to the processes that lead to the construction of the toilets and not put all their finances into the physical outputs. Supporting Federation teams is important in ensuring that sustainable sanitation solutions are delivered at scale.

This paper assesses the CCODE sanitation financing model based on focus group discussions (FGDs) and key informant interviews with beneficiaries of the loans from the cities of Lilongwe, Mzuzu and Blantyre as well as Nkhatabay and Mulanje districts; and with CCODE officials and other sanitation stakeholders in the country. It documents the various changes that have taken place to the fund system, the motivations behind such changes and the effect they have had in terms of access to improved sanitation among urban poor households. The paper also looks at some emerging sanitation models in Malawi and concludes by drawing lessons from five years of CCODE's sanitation financing and how such lessons could be used to improve access to better sanitation to low-income households in the Global South.

The study confirms that financing has been a barrier for households to improve their sanitation and that the loan-financing model has both directly and indirectly enhanced households' opportunities to move up the sanitation ladder. In addition, the study has found that the success of CCODE sanitation loans has been cultivated through social capital that came with the Federation – a social movement of the poor – as promoters of sanitation, and volunteers who have continuously supported thousands of urban poor households. The CCODE loan system was tied to ecological sanitation and the study finds that the 'uniqueness' of the technology incentivised Malawians to seek loans; 87 per cent of respondents in the study feel that they would not have been motivated if traditional pit latrines was the technology promoted. Furthermore, the loans did not only help households to build toilets – it provided them with bathrooms.

The study has drawn a number of lessons from the CCODE sanitation model including:

- Poor people are willing to move up the sanitation ladder, given the appropriate resources and support. The CCODE sanitation loans not only offer low-income households finance for sanitation that builds social capital, but give technical and product support. This package is not available on the private market, and contributes to the development of a collective sanitation strategy that is promoted by the Federation, linked to community structures.
- Beyond the emphasis on sanitation marketing, sanitation loans can be used to complement improvement of sanitation outcomes. To deliver sanitation at scale using the financing model requires building local capacities, competencies and structures to facilitate access to improved sanitation. The local support yields social capital that takes care of informational asymmetries and ensures that interested households have important information on opportunities for enhanced livelihoods.

- The CCODE sanitation loans complemented with local-level community-based structures yield social capital that can increase the value of sanitation loans while reducing sanitation delivery costs.

In addition, the study has drawn the following main conclusions and recommendations:

1. Funding for sanitation needs to be increased, but financing should look at innovative ways of attaining scale and sustainability. The success of the CCODE sanitation financing model has rested on the role of the Federation in community mobilisation and social awareness. External financing agencies should not only put all their finances on the physical outputs, but consider the processes that lead to the construction of the toilets. The CCODE loans have demonstrated the value in providing support for sanitation delivery through local teams, and that role that they can play in building sustainable sanitation solutions that are delivered at scale.
2. Market approaches to sanitation loans are important to improve the sanitation loan book. However, considering that sanitation is a public good and at times an economic one, it helps to rethink the evaluative criteria for performance. It is also important to understand that people targeted by these loans are those sidelined by the formal MFIs, and provision of loans to them is already an obvious risk. This study has shown that people are willing to pay for sanitation but are constrained by their economic situation (for example, the income ranges for the majority of people in the peri-urban areas is 20,000MK–100,000MK,[1] with a minimum wage at MK17,500 per month) (Kadewa 2014).
3. It is important to consider modifying the ecosan toilet designs or explore other cheaper but durable materials for construction.

[1] $1 = 596 MK at time of writing

1

Introduction

1.1 Financing urban sanitation in Malawi

In 2010, the Centre for Community Organisation (CCODE), a Malawi Slum Dwellers International (SDI) affiliate, initiated an extensive sanitation financing programme through its urban poor revolving fund called *Mchenga*. The aim of providing sanitation loans was to increase access to improved sanitation by overcoming the barrier of capital financing. While efforts to improve sanitation focused on changing attitudes of informal settlements dwellers to begin to consider sanitation as an important aspect to their wellbeing, there was no means through which households willing to improve their sanitation could immediately do so.

CCODE's sanitation programming included both 'soft' costs and hardware costs. The hardware costs came in the form of capital for the construction of sanitation units, which was seeded into the *Mchenga* Fund, and the 'soft' aspects supported communities to set up systems and structures for creation and management of demand for sanitation loans through mobilisation and awareness-raising initiatives, training, monitoring, exchanges and loan management. The success of the CCODE sanitation financing model has rested on the role of the Federation in community mobilisation and social awareness. This has been a distinct aspect of the CCODE sanitation model.

1.2 Study objectives

This study was inspired by the CCODE sanitation loans model, which is one of the financing mechanisms available to low-income households to improve their sanitation. The objectives of the study were to:

1. Explore the CCODE sanitation financing model and how it has evolved in the last five years.
2. Compare the CCODE sanitation model against other sanitation marketing strategies that have been used in the study areas.
3. Map out the relationships between changes in the management of the loans systems and access to improved sanitation.
4. Assess the role of Federation social capital in the scaling up of improved sanitation in Malawian peri-urban areas.
5. Assess if changes in the loan management system had any effect on loan repayments.
6. Assess if the loan financing model led to the sustainability of the CCODE programme, comparative to households that were directly subsidised by other projects.
7. Assess the impact of the model in relation to value for money and replicability and social sustainability.
8. Identify key lessons in CCODE's loan financing model.

2

Institutional arrangements for sanitation in Malawi

The Ministry of Agriculture, Irrigation and Water Development is the overseer of National Sanitation Policy. To ensure coordination in the implementation of the strategy, the Ministry of Economic Planning and Development Cooperation, which is a development planning entity, anchors the policy as well as providing strategic frameworks to ensure achievement of medium- and long-term goals of the country. To this end, there has been the development of a sector-wide approach (SWAp) to bring stakeholders in key sectors together for proper coordination of the sector programmes and resources. The Water SWAp, where sanitation falls, was launched in December 2008 and includes the Sanitation Thematic Working Group (TWG). This has representation from all stakeholders including key government ministries and NGOs working on the ground such as Plan Malawi, Water Aid, UNICEF, and CCODE.

However, household sanitation provision has been mainly at individual level, whereby households are responsible for construction and maintenance of their own sanitation units. This is across both low- and high-income locations, where individuals have either to construct latrines or septic tanks. Stakeholders in the WASH sector have flagged this as an indicator of low capacity of councils to take care of the needs of their populations, which has adversely affected their ability to regulate waste management.[2] The councils have control of sewerage systems, which service less than 10 per cent of the urban population owing to poor infrastructure; lack of policies, and practices that favour high-income planned residential areas.

Further, the councils are responsible for issuing of planning and development permits in the city. This role includes approval of house construction plans and enforcement of building standards and byelaws. The councils are not actively involved in the delivery of household sanitation, beyond managing the city sewer line, which serves a handful of the cities' elite. There is little involvement of the formal private sector, such as sewerage and waste management companies, in sanitation. The private companies focus on large-scale sanitation solutions, which are few in Malawi: the majority of urban dwellers are not connected to the sewer line and use pit latrines. Some private companies provide desludging and water management services

[2] For example ,the Water Sanitation and Environment Network (WESNET) has raised the same issue in its policy briefs

to individual medium- to high-income households who can afford to pay for them. The private companies also tend to work for commercial companies and other big institutions whose needs cannot be managed by the informal sector.

There is a vibrant informal sector mainly made up of masons and other unskilled workers who dig and construct the latrines used by the majority of the population in Malawi. There is also a rise in small-scale sanitation entrepreneurs such as gulper operators, women sanitation contractors under CCODE–Federation, and private toilet masons[3].

2.1 Common sanitation technologies

Pit latrines are a dominant form of sanitation tin low-income areas.[4] However, the Ministry of Agriculture, Irrigation and Water Development has recently published a list of technologies that are to be promoted in these, and rural, areas. These include VIP latrines and ecological sanitation. The Ventilated Improved Pit latrine (VIP) is a pit latrine with a black pipe (vent pipe) fitted to it, and a screen (fly-screen) at the top outlet of the pipe. Smell and flies are reduced or eliminated through the incorporation of a vertical vent pipe with a fly-screen at the top. The ecological sanitation latrines have a urinary diversion system and come in various types such Forsa Alterna and Skyloos.

A recent study by Bunda College of Agriculture (2014) indicates that ecological sanitation coverage and adoption is on the increase in informal settlements/ low-income areas, coming next to pit latrines. In the peri-urban areas of Blantyre and Lilongwe, 64.5 per cent used traditional pit latrines, which were 3 metres or more deep; 22.6 per cent used pit latrines less than 3 metres deep; followed by 5.7 per cent ecological sanitation users, 2.8 per cent flush toilets users and 2.7 per cent VIP latrine users. About 1.7 per cent was reported using ecosan, Fossa alterna toilets (Kadewa 2014). In addition, the study reported that, all things being equal, 41 per cent of the households interviewed would want to have an ecosan toilet, 30 per cent a water closet toilet and 20 per cent a VIP latrine (Kadewa 2014).

NGOs such as CCODE Plan Malawi in Mzuzu are currently promoting ecological sanitation in low-income areas where space is a growing problem due to higher population densities and the soils being too waterlogged for latrines in some locations. Whereas the sewer lines would probably save space, they require huge cost outlay and the councils are already failing to repair the dilapidated sewerage infrastructure. For example, the City of Blantyre in 2014 reported that it would need about MK2 billion to repair its sewer line and has no resources to do that.

For medium- and low-density urban areas, people prefer septic tanks, as there are no properly functional sewerage systems. There is no organisation that gives loans for septic tanks except when it is viewed as part of a housing mortgage. The septic tanks are constructed by individual household owners at a cost of roughly MK0.6 million.[5]

2.2 Sanitation financing

The NSP discourages subsidies for sanitation provision in Malawi. Previously, third sector agencies provided subsidies in the form of slabs and complete sanitation facilities to households. However, such approaches have been heavily criticised as unsustainable and akin to reinforcement of dependency and not possible to scale up. Although agencies that provided subsidies recorded excellent outputs in their reports, visits to their catchment areas reveal that people never used the cement slabs they provided for toilet bases. Those that had toilets constructed for them never managed them properly and often regressed to open defecation. For example, almost a decade ago, a development agency provided slabs to the people of Ngwangwa in Lilongwe Rural West, but the slabs can still be seen being used as a sitting place when bathing children, and some of the villagers say that they never used the toilets and still go to the bush to defecate.[6] This is one reason that led to emphasis on sanitation marketing and CLTS in the NSP so as to sustain and improve usage of the facilities by individuals; there is emerging evidence that people are more willing to use what they have paid for.[7]

Meanwhile, increasingly there has been a call for more focus on sanitation financing. The issue has been that while people have been provided with information on

[3] People who build toilets
[4] CCODE's work has mainly focused on informal settlements in the cities of Lilongwe, Blantyre, Mzuzu and Zomba. CCODE has also implemented similar initiatives in Nkhatabay, Mzimba, Salima, Rumphi, Karonga, Mulanje, Chinkhwawa, Chiradzulu, Machinga, Dowa and Mangochi districts
[5] At the time of the study, MK450 was equivalent to USD1. This means that aseptic tank roughly cost US$ 1,350
[6] Based on interview with Jabulani Kamngoya from the area who works as a journalist in Lilongwe City
[7] A typical example is the issue of mosquito nets that are offered free and those that are sold. Randomised control trials have shown that households that have bought their mosquito nets are more inclined to use them. See Banerjee and Duflo (2010)

sanitation options, they are often constrained by their economic circumstances. This has prompted sanitation agencies to begin considering a framework for financing sanitation for the urban poor. For example, during the study, Plan Malawi and Water for People talked about their efforts around sanitation financing for their 'peri-urban' water and sanitation projects.[8] As a result of this, there are a number of emerging approaches with regard to sanitation financing. The following are some of them:

- Loan financing through banks: For example, Water for People entered into agreement with Opportunity International Bank and gave out 210 loans for sanitation at 24 per cent interest rate per annum. Despite realising an 88 per cent repayment rate, the partnership has not proceeded. However, at the end of the project the bank felt it could not continue without a guarantee. Plan Malawi also tried to explore the same arrangement in Mzuzu City but it did not materialise because their funder, The European Union (EU), does not support revolving funds.
- Special revolving funds for sanitation managed by an NGO: CCODE's attracted agencies such as Comic Relief, DFID, and the African Development Bank, among others.
- Village banks providing loans to members to improve sanitation: This is an emerging approach and is happening with some CCODE programmes in conjunction with We Effect in Salima district, and other groups working with village banks such as Plan Malawi in Mzuzu City.
- There have been efforts to engage MFIs in considering investing in sanitation. However, only Epik Finance, a subsidiary of Enterprise Development Holdings, a holding company founded by CCODE, does so. At government level, there is no special fund for sanitation financing although a Sanitation Sector Investment Plan has just been developed. At present the government funds public sanitation although its annual expenditure is low at 0.1–0.5 per cent of GDP, which is inconsistent with the eThekwini Declaration (2008), of which Malawi is a signatory.[9] The updated eThekwini Declaration calls on countries to allocate at least 0.5 per cent of GDP to sanitation and hygiene and to mobilise support and resources at the highest political level for more in national development plans.

2.3 CCODE and Federation sanitation programme

In 2010, the Centre for Community Organisation initiated an extensive sanitation financing programme through its urban poor revolving fund called *Mchenga.* The aim of providing sanitation loans is to increase access to improved sanitation by overcoming the barrier of capital financing. According to CCODE first Executive Director and Founder, Siku Nkhoma, the loan model was adopted to address Federation needs on household sanitation. Federation members in their savings groups continuously grappled with the question of access to better sanitation. 'The majority of our members had poor sanitation and they could barely afford to construct improved latrines,' said Nkhoma. So while to improve sanitation focused on changing attitudes of informal settlements dwellers to begin considering sanitation as being important to their wellbeing, there was no means through which households willing to improve their sanitation could immediately do so. The national leadership of the Federation then passed a resolution to include sanitation loans as part of the *Mchenga* Fund loan portfolio, which already included loans for business, housing and home improvement.

Figure 1. CCODE toilet, credit CCODE 2015

[8] There is a growing use of the term peri-urban in the WASH discourse in Malawi to refer to low-income, and mainly informal, settlements. 'Informal' is viewed as unplanned and unregulated and therefore not part of the city, whereas 'peri-urban' is a way of talking about the city periphery or outskirts – ironical in that some if not most of these areas where the poor live are in the inner or the heart of the city

[9] 2015 ethikwini update. Available online: http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/ngor_declaration_on_sanitation_and_hygiene_launched_at_africasan4_0.pdf

Consequently CCODE's sanitation programming included both soft and hard costs. The hard costs came in the form of capital for the construction of sanitation units; the soft aspects supported communities to set up systems and structures for creating and managing demand for sanitation loans through mobilisation and awareness-raising initiatives, training, monitoring, exchanges and loan management.

2.3.1 Scale of the CCODE sanitation loans

Since its inception, CCODE has implemented a number of sanitation programmes in all the regions of Malawi but largely focusing on peri-urban areas. According to the *Mchenga* Fund loan book, as of December 2014 CCODE had issued over 2,000 sanitation loans, with funding streaming from partners such as:

BOX 1. FUNDERS

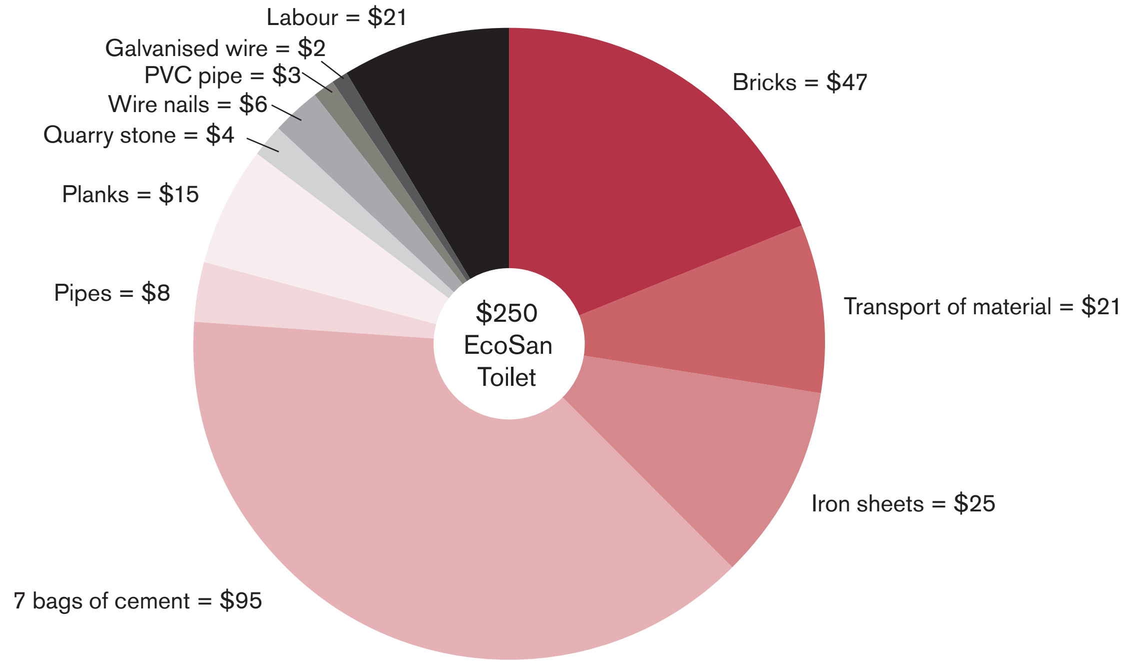
- Homeless International (Now Reall)
- Comic Relief
- Jersey Overseas Development Corporation
- UN-Habitat
- DFID
- Global Water Challenge
- Practical Action
- Slum/Shack Dwellers International
- European Union
- WaterAid
- Selavip
- We Effect (formerly Swedish Cooperative Centre)

Besides the donors indicated above, some of the loans have come from the *Mchenga* Fund revolving funds. In fact, the *Mchenga* Fund continues to support areas, where sanitation projects have been wound up, with toilet loans. In addition, the Fund has been able to use revolving funds to support districts that have not been funded by projects. The key components that are funded through the loan are illustrated below. However, households are expected to contribute some of the materials to reduce the loan size.

According to the *Mchenga* management information system, the organisation has issued over 1,389 loans valued at MK106,623,466.62 by December 2014. The smallest loan that the fund has offered for a toilet since 2009 was MK13,938, the highest MK200,000. The maximum loan amount that the Fund can offer is for a complete ecosan toilet with an attached bathroom, where all materials and labour are paid for by the loan. The Fund can, however, provide any loan amount below the maximum, based on the applicant's request.

Delivering these numbers has been an ever-evolving task for CCODE and its alliance partner, the Federation. Since the inception of the programme, the processes and systems used in loan administration have evolved to respond to such factors as affordability in light of an inflationary macroeconomic environment that characterises Malawi; capacity to respond to demand from interested households; and overall efficiency and effectiveness of the sanitation loan system, among others.

Figure 2. Costs paid by an ecosan toilet loan.



Source: Diagram adapted from Reall Crowd Funding Campaign for Ecosan, 2014

3

The CCODE sanitation financing model

CCODE established the *Mchenga* Urban Poor Fund, which was incorporated in 2006, primarily to provide and manage housing loans to Federation members. The first agencies to capitalise the Fund were Slum Dwellers International and Homeless International (Now Reall – Real Equity for All). The first *Mchenga* loans were issued as home loans to Federation members in Blantyre, Lilongwe, and Mzuzu, and business loans to groups in Lilongwe and Blantyre. The need to set up a special revolving fund was mainly driven by the need to provide financial opportunities to low-income households marginalised by the formal financial institutions.

The formal financial institutions have terms such as requirements for collateral, which most low-income households do not have. In 2009, CCODE started providing toilet construction loans to organised communities in urban and peri-urban Malawi. The provision of sanitation loans has been one of the exclusive aspects of the *Mchenga* Fund in an economic environment where most MFIs focus on business loans and view mortgages, let alone sanitation financing, as risky.

The CCODE sanitation financing model provides a zero-sanitation hardware subsidy. Households pay the full cost of the sanitation facilities by getting a loan that buys materials and pays for labour. The household has to make a down payment of the loan as an expression of interest to get the loan. The household is then vetted, based on eligibility criteria established by the Federation. The vetting process also establishes if the applicant has suitable space on which the toilet can be constructed. When the loans were first rolled out, the repayment period was two years and carried an interest of 2 per cent per month, calculated at a reducing balance. The loan repayment was revised to a year and interest rate increased to 4 per cent per month in mid-2014.

3.1 How this process worked

Partners[10] have seeded the fund with capital for the construction of toilets, which are mainly ecological sanitation toilets. Interested households apply for sanitation loans and get their loans in the form of construction materials once they pass the vetting process, which requires that an applicant:

1. Belongs to a group of other applicants within their vicinity, the group having a minimum of five members.
2. Has materials such as sand, bricks and quarry and has made an undertaking to provide labour (including drawing water and a helper to assist in mixing mud mortar).

[10] Partners include those listed in the Box for funders above

3. Has made a 10 per cent down payment of the loan being applying for.

Over the last five years, CCODE's loan disbursement and repayment processes have changed. This study identified and categorised these changes in some five 'generations' of loans.

3.1.1 Members only: the generation of centre-based loans (2009–mid 2010)

Initially, sanitation loans were made to Federation members only. The basic building unit of the Federation is the Centre. The Centre is made up of members from one area that come together and take part in Federation rituals.[11] For the first sanitation loans, people had to apply through the Centre. The application process at the Centre was as follows:

- Members of a savings group (called the Centre) had to be interested in the sanitation loans.
- Each member of the group, ranging from five to 30 people, had to start saving for the toilet loan.
- The Centre had to apply as a group for the loan from the Mchenga Fund.
- Before sending the applications to the Mchenga Fund, the Centre had to present its interest to a Federation district meeting, which took place monthly. The district meeting was attended by representatives of members of a particular district who assumed the name of district leaders.
- The district leaders assessed the eligibility of the group based on its savings record, loan management at Centre level and its savings for the down payment of the sanitation loan. The eligibility criteria also looked at the membership history of the applicant. To qualify, an individual had to have been with a Centre and saving regularly for at least three months (saving books were also assessed). The applicant also needed to have at least 10 per cent of the loan amount they were applying for as deposit/advance payment to the loan. Based on these evaluation criteria, a loan was approved at district level.
- The district's loan was communicated to a regional level meeting, which also took place monthly.
- Thereafter, a national meeting, constituted by Federation national leaders, ratified the loan application.
- Based on a resolution from the national meeting, the Mchenga Fund examined all the relevant paperwork and disbursed the loan to a district account of the Centre.
- The district Federation account signatories withdrew the money on the behalf of the group and took it to the Centre.
- The Federation leadership at district level helped the Centre members in the procurement of materials – usually done in bulk for economy. Although there was no list of suppliers, the leadership stressed that items should only be bought from reputable shops in town, with price as a major influencing factor.
- Builders were sent by CCODE to construct the toilets at the Centre. The builders were paid through the sanitation loan. The Federation trained all builders and each district had a pool of those trained especially for ecosan construction, who were allocated to jobs as they came in. The CCODE Community-Liaison Officer was responsible for all information regarding builders and usually liaised with district leaders in the allocation of the builders.

The study has found that Fund has only offered loans for construction of ecosan toilets since it was established. According to Federation leadership and CCODE records, ecological sanitation was preferred because the sanitation programme at CCODE was not only interested in moving people up the sanitation ladder, but also considered sustainability and long-term investment requirements of the technology. The ecosan toilets were chosen largely because of lack of space in the informal settlements of Malawi, such as Mtandire where discussion about sanitation technologies started and the first ecosan toilets were constructed.

In the words of one Federation leader from Mtandire:

'We looked for toilets that could last and did not need us to invest in sanitation again and again. We also wanted to take care of our space, which was getting less and less…so we found ecosan and we said this is it.' – Norah Baziwell, Federation leader, August 2015

According to case studies by CCODE in April, 2015, there are a number of reasons why ecosan is preferred against other sanitation options.

[11] The Federation rituals are aligned to SDI rituals, which are documented at: http://sasdialliance.org.za/what-we-do/

Table 1. Reasons why ecosan is preferred against other sanitation options

REASON	QUOTE	SOURCE
Permanency	'I like this toilet because it has a long life span such that even my great-grandchildren will use it.'	Linly Mkwapatira, Federation member, Angelo Goveya, Blantyre City.
No odour	'When you are out here you can't smell anything. I can sit on the steps of the toilet while having my meal and I won't feel disgusted with any smell.'	Agnes Mchecheta, Federation member, Chinsapo, Lilongwe City.
Manure for farming	'I don't need a coupon [referring to subsidised fertiliser that is accessed using a coupon] with this toilet, I have a coupon right inside me.'	Esther Kamanyengo, ecosan adopter, Ndirande, Blantyre City.
Modernity	'When you have this toilet, everyone knows that you are not backward, you are moving forward…'	Patrick Sankhulani, Federation leader, Mulanje.
Saves space	'I was going to build new toilets anyway but then I don't have space to construct new toilets anymore. So this toilet has come to my rescue…'	Catherine Chilewani, ecosan adopter and former Federation member, Mtandire, Lilongwe City.
Works for water-logged areas	'It is very waterlogged here and the water table is high. I struggled with underground water. I had to build a toilet every year. This toilet is built above the ground, and I don't have to build another toilet again…'	Colleta Pingoti, ecosan adopter, Nancholi, Blantyre City.

The Federation's search for sanitation options was limited to non-water-based technologies, because they wanted to avoid water bills that come with such technologies. In addition, because water networks have not fully expanded their reticulation to low-income areas, most of the informal settlements do not have proper water supply and rely on communal water points. Even if people would collectively pay for water, supply in most informal settlements is intermittent owing to low water pressure. Meanwhile, current efforts to improve the so-called peri-urban water supply have been driven by third sector organisations and international development agencies such as the European Development Bank, the African Development Bank and the European Union. The focus of these agencies has been strengthening the utility companies' water supply systems and expanding communal water points. There has been no effort by the GoM to improve water supply in the informal settlements although the National Water Development Programme, a brainchild of the World Bank, introduced a month-long promotional programme that provided a 50 per cent subsidy to new water connection applicants. However, this programme has not been supported by improvement of water supply infrastructure in the low-income areas/informal settlements.

3.1.2 Loan repayments

Individuals made loan repayments but the Centre was responsible for ensuring its members were making their repayments diligently. All beneficiaries of the toilet loans deposited their loan repayments before they were due into a designated *Mchenga* Fund account. Members had to provide a deposit slip as evidence for repayment to their Centre, which received two deposit slips – a third stayed with the beneficiary member. The Centre compiled all the repayments and took the deposit slips to the district meeting for reporting purposes.

3.1.3 Issues with members only, Centre-based loans

Discussions with Federation members and leadership brought up a number of issues with the loans that were exclusive to Federation members, including:

- The members only approach increased community interest in the Federation activities in that the loans became an incentive to join the Federation. For example, in Area 23, Lilongwe, the number of people joining Federation Centres increased with the number of toilets constructed. According to an interview with a Federation leader from the area, Dorothy Yassin, people were joining the Federation because it was the only way they would be able to get an ecosan toilet loan.
- Since the loans were exclusively for the Federation, the uptake when judged by the number of toilets constructed was low. For example, records from district meetings showed that it was difficult to construct just three toilets per month, since few members were interested or could not afford the 10 per cent deposit required to access the loan.
- The study also found that some groups that had received other types of loan, such as business loans or home improvement loans, were side-lined because the system did not allow people to have multiple loans.
- The study found that in terms of loan management, this system made it possible for Federation and CCODE to easily follow up on the loans through the groups. The repayment rates were also better, usually above 90 per cent, because the members who received loans usually had a good credit history, which was considered as part of the eligibility criteria. The Federation required that for an individual to get a sanitation loan, they must have taken a loan from their Centre and serviced it in good time.

3.2 Sanitation loans for all generation

Not long after the Federation members started building decent ecosan toilets, they realised that sanitation issues affect everyone. The ecosan toilets that they were constructing helped them personally to ensure proper disposal of human waste, but others in their neighbourhood, excluded from accessing sanitation loans, made Federation families vulnerable too. Provision of the loans to everyone yielded public health benefits. The World Health Organisation has found that improved sanitation coverage (in this case arising from opening up of the sanitation loans) significantly reduces diarrhoeal and respiratory diseases, as well as maternal and infant mortality rates (Hutton *et al.* 2007).

At the same time, members realised that many households wanted to improve their sanitation but not join the Federation, and there was no other institution that provided sanitation loans. In addition, the low uptake of sanitation loans by Federation members was not meeting the targets of the sanitation programme. Thus there was a further incentive to include non-Federation applicants. In order to reach out to everyone, the Fund opened up the sanitation loans to all community members under a new system. Every area/settlement was assigned a Federation leader from a Centre who oversaw the loans in that particular area/settlement. Centre members mobilised their fellow community members around issues of hygiene and ecosan toilets. Interested non-Federation members had to make a formal application for the sanitation loan to *Mchenga* through the Centre.

The Centre vetted interested individuals. The vetting process looked at the 10 per cent down payment deposit and availability of materials like sand, bricks and quarry, which the applicant was expected to provide so that they get a small loan covering only essential materials – cement, iron sheets, PVC pipes, timber, wooden doorframes and doors, nails, and payment for the specially trained ecosan mason. The individuals had to be in a group of five to 10, in order to have their loan processed. The group approach was insisted upon to increase peer pressure among the applicants to repay the loans and ensure that transportation costs, which can take up to 30 per cent of the total loan amount, were reduced. The group approach also enabled purchase of the materials in bulk, which gave them more bargaining power over prices. This arrangement was similar to the Federation exclusive groups, the difference being that these were not Federation groups and were not involved in any rituals.

The group had to set up rules on how they would manage their loans to ensure compliance among borrowers. The non-Federation group had to elect a treasurer, who was responsible for keeping records of the group and making bank deposits on its behalf. The Centre-level Federation leadership was responsible for following up the loan and furnishing repayment details to the Fund. Through this process, many non-Federation members improved their sanitation.

The Federation members interviewed in the study explained that before the loan could be released, it still needed to be approved at the district meeting. This was because the *Mchenga* Fund made payments through a Federation district account, which then disbursed the money in the form of materials to the applicants. Besides that, the district was responsible for monitoring and following up on all loan repayments through a district loan enforcement team. The Federation leadership at regional and national levels got reports for all loans at district level. Any district that failed to monitor its loans and performed poorly in repayments would be penalised by having loans to it cut off until its repayments improved. The case study below shows how non-repayment of a loan that went to a politician-cum-minister affected the district's loan performance and subsequently households that wanted to access improved sanitation:

3.2.1 City-level leaders training

Traditional and community leaders are regarded as credible sources of information in Malawi. For example, all information that needs to be passed to the wider community is usually relayed to the traditional leaders first, who then issue instructions on how such information should be transmitted. In order to cultivate wider acceptance of the ecosan toilets as well as the loan processes, CCODE conducted awareness meetings and training for these leaders, which took place from March 2010 in Lilongwe City. As a result, some local leaders accessed the sanitation loans themselves and constructed the first ecosan toilets in their respective neighbourhoods. These first toilets effectively became 'demonstration models' and the leaders not only gave credence to ecosan technology but were able to explain how the toilets work and how loans could be acquired.

3.3 The generation of the sanitation teams and division of labour

More applications kept flowing in to the Federation leadership at Centre level – and it was becoming increasingly important to come up with a loan system that would ease pressure on individual volunteers here. In order to achieve that, each district where sanitation loans were being issued set up sanitation teams that were responsible for all the process in the loan financing. Under the sanitation committee of the Federation there were eight teams, each with a distinct function.

Table 2 provides a summary of the teams and their corresponding roles:

Table 2. Federation sanitation teams and their respective roles

TEAMS	ROLES
Mobilisation	Community awareness, demand creation, training
Vetting	Eligibility assessments, contract signing
Procurement	Received funds to procure materials and labour for the construction of the toilet
Material Audit	Materials verification and audit of receipts
Loan Enforcement	Enforcement of loans repayments and trainings on repayments
Building	Construction supervision and quality assurance
Monitoring	Usage monitoring, training on usage of toilets and hygiene practices
Discipline	Compliance monitoring of all the teams. Complaints handling and resolution of disputes

The teams represented a form of a continuum on the sanitation financing model. In this case, the *Mchenga* Fund, got information about loan applications from the CCODE Community Liaison Officer who compiled all the loan applications after vetting. The Fund then made payment to a Federation account, the signatories being Federation national leaders, and was managed by the CCODE finance department. The money was released to the procurement committee, which informed the loan applicant about the release of the funds. The rest of the teams then performed their roles as indicated above. The distinct pieces of work that each of the teams did fed into the others to ensure:

1. Transparency in the process
2. Division of labour
3. Improved loan repayments
4. Quality assurance
5. Proper usage and management of the ecosan toilets

Following vetting, the applicant had their loan approved and disbursed, in the form of materials. The disbursement of materials as opposed to cash was meant to ensure that the loans were only used for their intended purpose. Usually, individuals were less inclined to abuse materials than cash. Each of the groups was assigned a Federation member who helped them in the procurement of the materials. Group members shared costs for transportation and could buy materials in bulk, hence increasing their bargaining power. The beneficiaries themselves made all payments for the materials; the group treasurer was the custodian of all receipts.

After procurement, each of the beneficiaries was assigned a builder. Upon completion of the toilet, a Federation member under CCODE's sanitation team came to train the beneficiary and their family members on how to use the toilet and make loan repayments. All group members were given one bank account through which they made these.

The beneficiary needed to fill out their deposit slips in triplicate and indicate the name of their group. One bank deposit slip was then sent to the Fund, one remained with the group treasurer and the other with the beneficiary. The Fund was managed at CCODE by a fund manager, who processed the loans, updated repayments and printed out loan repayment reports to appraise the beneficiaries on the loan standing.

This loan process made the following possible:

1. Individual households without proper sanitation and with cash flow problems had an option to apply for a sanitation loan.
2. The loan financing made it possible for households to own properly designed toilets built with strong materials like bricks, quarry, iron sheets and cement.
3. Households repaid the loan instalments within a two-year period, with a monthly 1 per cent interest on reducing balance, which meant that they would be servicing the loans at their own pace and based on their available income, so long as it was within the schedule.

Households would need time to save money to afford building materials, but high levels of inflation and competing resource commitment, there was always a chance that savings for sanitation could be misused. Loan collections were overseen via visits to remind beneficiaries of their commitment. Individual loan reports were produced by the Fund and communicated to the beneficiary. The loan enforcement team was also responsible for loan collections in cases where individuals had not been able to go to the bank to make their repayment. The *Mchenga* Fund/Epik finance had a dedicated phone line, which the loan enforcement team members could call to get instant loan updates for clients as well as provide loan repayment updates. The availability of the dedicated phone line has provided an accessible information source to the clients, although the loan enforcement team have complained that the phone line isn't always up and running. It is not clear how the cost of managing the phone line is factored into the sanitation loan, except that it is part of the loan management cost that is added to the interest rate.

BOX 2. THE MINISTER NEVER REPAID HER LOAN, AND THE WHOLE DISTRICT WAS PENALISED

Mulanje district is located in the southern part of Malawi and takes its name after Mulanje Mountain, the third highest mountain in Africa. The district got its first ecosan toilet in 2010, when a demonstration toilet was constructed by one of the district's prominent traditional leaders. Since then, applications have poured in, and more toilets were constructed. Loan repayments from the district were also impressive, standing at not less than 80 per cent every month. Mulanje was the shining star of the southern region. But this was not for long. In 2011, a Member of Parliament who was also a Cabinet minister was excited when she first saw the ecosan toilets in Lilongwe City, some 450 kilometres from her constituency. The Minister had a private secondary school, which had just been constructed but had no toilets. She approached CCODE and the Federation: she wanted to get a loan for eight ecosan toilets. The cost of a toilet then was MK40,000. Having an MP construct an ecosan through loan would endorse sanitation loans and ecosan in Mulanje, Federation members there thought. The MP made a MK40,000 down payment. The loan was issued and works begun. Monitoring visits were made and students at the secondary school where these toilets were constructed in a block were trained on their use. But the MP never repaid the loans, even after several calls from the Mulanje Federation leadership. The non-payment started taking its toll – the whole southern region was infuriated and it was agreed that no more loans to Mulanje until the MP started repaying. For months, no sanitation loan went to Mulanje, but applications kept trickling inThe MP still did not pay, the region could do nothing and finally rescinded its decision not to make loans to Mulanje.

Meanwhile, between 2009 and 2012, CCODE's loan -financing model faced a lot of bottlenecks. Default rate was high, reaching as much as 70 per cent, in certain areas, ostensibly because of a perception among the beneficiaries that the loans were from an NGO and didn't really have to be repaid. In addition, inflationary conditions in the country meant that the buying power of the local currency was eroding. For example, the study found that the initial cost of the toilet in 2009 was MK20,000, then MK25,000 in early 2010, rising to between MK30,000 and MK35,000 by the end of 2010 and to MK 150,000 by the end of 2014. The cost of a 50 kg bag of cement rose from MK2,300 to MK5,600 (an ecosan toilet needs between six and eight bags).[12] Thus, despite that the loan was in the form of a revolving fund, recovered monies barely covered the costs of materials (see the example below). Instead of growing, the Fund was shrinking, unable to meet its future demands.

In addition to the above challenges, there were inherent weaknesses in the administration of the loans, which affected repayments. For example, there were time lags between when an individual made a loan repayment and when the repayment was reflected in the system. According to discussions with CCODE and Federation teams, the lags was due to centralisation of the loan fund system. Despite supporting a bottom-up process, the system was too top-down in its approach. All transactions were managed from Lilongwe CCODE head office and the loan enforcement teams needed to send their records there for the loans to be updated. Some of the deposit slips could not be properly handled or were lost and, in some cases, the loan enforcement officers kept the deposit slips longer than they should.

The information sent was voluminous, requiring weeks to be processed. The time lags meant that the Fund system could not provide real-time updates on the actual standing of the loans. As the Fund was never up to date it was extremely difficult for it to send timely reminders to beneficiaries whose repayments were behind schedule. The study found that the Federation loan enforcement team did not have a proper record-keeping system itself and that it always needed information from the Fund to act. In the end, some of the loan beneficiaries admittedly forgot about their loans and interests piled up, making it even more difficult for them to settle what they owed.

3.4 Changing the system to the generation contractors

In 2012 CCODE introduced community contractors as a strategy to improve loan repayments and contact with the beneficiaries. This followed from a learning visit to India where Federation contractors had long operated.[13] In Malawi, the contractors, mainly women, were made responsible for the toilets that they had personally recruited an applicant. This system has reduced the role of the Federation savings centres although they still a significant role in community mobilisation and awareness creation of ecological sanitation. All procurement for the toilets was placed in the hands of the contractor, who was required to conduct the process in close liaison with the beneficiary. Upon completion of the toilet, the contractor was also responsible for loan collection. For each toilet, the contractor has to follow materials prescribed in the Bill of Quantities for toilets erected by CCODE engineers. Thus the process is more market-oriented with a lesser role of the centre in community organisation.

Table 3.

YEAR	OFFICIAL INFLATION RATE (PER CENT)[14]	AVERAGE LOAN AMOUNT ISSUED	REPAYMENT PERIOD
2009	8.4	20, 000	2 years
2010	7.41	32,500	2 years
2011	7.6	45,000	2 years
2012	21.3	45,000	2 years
2013	28.3	100,000	2 years
2014	23.8	120,000	1 year

[12] During this period, the dollar to Kwacha conversion has gone up from 1US$ = MK140 to 1US$ = MK399.19. The details of these changes are available at www.rbm.mw. The devaluation of the Kwacha pushed up costs of building materials and increased the cost of loans, thus making them expensive for some households. (CCODE, 2011, 3rd Quarter Report for Improving Access to Water and Sanitation for the Urban Poor in the City of Blantyre)
[13] Community learning exchanges is one of the rituals of Federations of the urban poor across the global. The principle is generally that communities usually learn better from learning exposure visits to their fellow communities. More information about these exchanges is available online: http://sdinet.org/sdi-focus/exchanges-and-learning/
[14] Source: tradingeconomics.com

3.5 Changes at the Fund level

In 2010 Malawi passed the Microfinance Bill, which set out categories of financial institutions. Under this law all agencies providing any kind of loans needed to register with the Reserve Bank of Malawi, the regulator of financial institutions. As CCODE was providing loans through the *Mchenga* Fund it needed to either register as a non-deposit-taking microfinance or a microcredit lending institution. This would change the identity of CCODE, which would be in conflict with its strategic goals. Consequently, CCODE made a strategic decision to register a microfinance institution called Epik Finance under Enterprise Development Holdings, a holding company that CCODE has set as part of its sustainability plan. Besides managing the old *Mchenga* Fund, Epik Finance was to raise capital from other sources and specialise in the provision of habitat loans to low-income households.

Following a deliberative process with the Federation, all *Mchenga* Fund capital was moved to be managed by Epik Finance, requiring CCODE to pay a small administration fee. CCODE and the Federation retained their role and powers in the management of the Fund, and continued to encourage households to seek loans. Epik Finance would act as fund managers for the old Fund and regularly issues reports to CCODE and the Federation.

3.6 The generation of the CCODE–Epik collaboration

By mid-2013 CCODE had restructured its modus operandi and placed management of its capital funds for water, sanitation, housing and businesses in the hands of Epik Finance. This has changed the model for sanitation financing. Capital funds for sanitation are transferred by CCODE to Epik, which is responsible for loan enforcement and reporting and managing the loan book on behalf of CCODE. For each and every loan that Epik offers, it receives 5 per cent.

In this new arrangement, contractors still play their role as previously.

Clients now see CCODE only as a partner of the Federation, building poor peoples' capacities around sustainable sanitation and hygiene issues, whereas Epik is the microfinance agency that provides the loans. The study found that the change has altered people's perception of loan repayments. Unlike in the past where people felt their loans were charity money, which they could choose not to repay, they now understanding that Epik is a business entity, which needs its money back. This has the potential to solve the default problems. However, at the time of the study, Epik had not yet put in place strong loan enforcement mechanisms including recruitment and training of a loan enforcement team.

In addition, although Epik has taken the *Mchenga* Fund aboard and introduced services to other clients such as junior civil servants, it does not have dedicated staff to manage the CCODE's loan portfolios. According to some Federation members, the new system has come with delays in loan disbursements when applications reach Epik. This, however, is being worked on but may take time to improve due to Epik's limited financial ability to recruit extra staff.

4

Impact of CCODE sanitation loans

A number of client experiences were documented on CCODE loan financing. The following section analyses the sanitation loans in relation to the study aims outlined at the beginning of the paper.

4.1 Tying loans to ecological sanitation

Unlike similar arrangements, CCODE sanitation loans are tied to ecological sanitation. The loans are offered specifically to purchase materials for constructing ecosan toilets. This means that the maximum amount of a loan is what CCODE considers adequate to purchase the necessary construction materials. In addition, the loan package caters for builders. These payments are made directly to the builder, who is specially trained by CCODE.

Some of the ecosan toilet owners who accessed a CCODE loan felt that they did not want to construct an ordinary toilet, which lacks the ecosan's relative sophistication and visual appeal. In the words of an ecosan toilet owner in Ndirande:

'I can't borrow money to construct an ordinary toilet. People would laugh at me…they will say how can she get a loan to build a latrine? But I borrowed to construct ecosan, and when people look at it and I tell them I got a loan, they want to know how they can get the loan too.' – Elluby Mwase, Ndirande Township, Blantyre City, during a focus group discussion.

Considering the average cost of the ecosan toilet, at MK150,000 in Blantyre City in December 2014, and the income levels of most people, which averages MK50,000 in the low-income areas, it is possible to say that the loans tied to the technology approach has helped people to move up the sanitation ladder. This is mainly because most households say that they could not afford to pay for the ecosan toilet cost all at once.

There are criticisms of CCODE for its emphasis on ecosan as the only technology. The study found that while other WASH NGOs applaud CCODE's sanitation financing model, they criticised it as being prescriptive. The study also found that the promotion of ecosan by CCODE has not been followed with an extensive programme to promote usage of ecosan products such as humanure. The fear of other WASH organisations is that the rather 'one-size-fits-all' approach taken by CCODE to promote ecosan may create more waste as not all households can use humanure.

The study found that for every five households who have harvested humanure from their toilets, only two have used it. In addition, some households felt that if CCODE would provide a range of sanitation options to be financed through the loans, they would be able to choose, because ecosan toilets are expensive and there are other cheaper options: for example, a VIP latrine in December 2014 cost approximately MK80,000, which is about 40 per cent less. Fewer than 2 per cent of the households felt that they would be able to service a bigger loan for a septic tank, if there was that option. The study, however, found that through its habitat loans, Epik is able to provide loans for septic tank construction, but this is not linked to CCODE's sanitation loan portfolio.

Despite the criticisms, ecological sanitation is proving to be an accessible solution for its adopters. This is particularly relevant to the informal settlements where space shortages are more pronounced and the terrain is sometimes rocky, making it difficult to dig deeper latrines or is too waterlogged for a pit latrines to be erected cost effectively.

4.2 Impact of social capital on the loan system

Federation members/leaders are ordinary people who are equipped with information on the loans system as well as the sanitation technology. The study found that involving the Federation helped prospective households to have trust in the loan process. A woman in Mzuzu said:

'I think the Federation helped us a lot. It is unlike using posters of just any old communications. You can't ask posters for clarity, but now using people we know and live with in the neighbourhoods to understand ecosan and the loans, gave us hope in the process.' – Participant at CCODE Mzuzu Office

Daily contacts, group meetings, access to credit, a network of group members, a careful vetting of borrowers and enforcement of loan repayments combine to produce an effective mix of social capital and financial rigour (Etherington 2012). To increase access to improved sanitation, the Federation helps prospective borrowers to estimate the required materials, to form themselves into a group, accompanies them to the market, obtains price quotations for enough materials for all toilets, supports them with transport and storage, and to find a trained mason. The CCODE sanitation loans rely on Federation social capital so much so that the ecosan toilets have been christened *Zimbudzi za Fede*, meaning 'Federation toilets'.

4.3 Loan availability and motivation to improve sanitation

Based on FGDs with ecosan adopters who accessed the sanitation loans, the study has established that the availability of the loan and information provided by people they knew from their neighbourhoods expedited household decisions to improve their sanitation circumstances. Households were asked if they would construct the same toilet without loan financing. Their response was that they would still want to construct the toilet but this would delay their efforts to move up the sanitation ladder due to their financial position. An ecosan toilet is relatively expensive and it would be difficult for an ordinary Malawian to construct the toilet at the prevailing cost of materials without a sanitation loan.

However, the study found that the requirement of a 10 per cent deposit to access the loan is a barrier for households who cannot afford the upfront payment. The study established that when the *Mchenga* Fund was moved to Epik finance in 2014 and the loan terms were restructured to reflect the new market-based philosophy of the Fund, interest rates were increased to 4 per cent a month at reduced balance, and the 10 per cent for toilets was fixed at MK12,000.00 – when toilets were pegged at MK120,000. The loan repayment period was also reduced to 12 months.

Epik Finance could only disburse funds when a household made the MK12,000 down payment. However, most households could not afford to raise such an amount, in one sanitation project in Blantyre and Mulanje, for example, CCODE and the Federation could not manage to meet a target of at least four toilets per month despite people's interest. In one monitoring report for the project, Urban Research Institute, which was CCODE's partner responsible for monitoring and knowledge management in the project, indicated that the high upfront payment was responsible for the poor performance of the project.

BOX 3. LEVERAGING SOCIAL CAPITAL FOR SANITATION: MAI ESTHER MANGANYERA MADE US BUILD TOILETS IN NANCHOLI

In Nancholi, an informal settlement in Blantyre City, there are 56 ecosan toilets (roughly translating into a MK8,400,000 investment in sanitation infrastructure at current costs). These toilets have been constructed through mobilisation by women, some of them sanitation contractors. Mai Manganyera is one of the Federation leaders who have helped mobilise households to access loans to build these sanitation facilities. She alone has supported 28 households to construct ecosan toilets. Over 75 per cent of these households are her close friends. One of the friends is Colleta Pingoti, a 45-year businesswoman who has lived in Nancholi for a decade and a half.

Colleta constructed her ecosan toilet in 2012. Before then, Colleta had had a pit latrine that filling up and needed to be replaced due to the rocky terrain of Nancholi, which made it difficult to dig a deeper latrine. Officers of an NGO implementing a WASH project in the settlement, had approached Colleta. She told them that she understood that she could get a loan from a bank but was afraid that she could end up losing her property to the bank if she failed to repay her loan. And she did not know the officers who had come with the information. She thought they were just doing their job and if she faced any problem with the toilets they were advocating, she would not ebe able to contact them. One day, Colleta was moving around her neighbourhood, and saw an ecosan toilet and learnt that Mai Manganyera knew more about such toilets. She got Mai Manganyera phone number and called her. When Mai Manganyera came to her home, she recognised her as a member of a women's group she used to be involved with. The women started talking and finally Colleta decided to construct an ecosan toilet. She said she got a loan for it because she could trust Mai Manganyera. Colleta finished repaying her loan before schedule. She said that Mai Manganyera would come to visit her, and she would give her money for the toilet loan. Colleta thinks that if Manganyera were someone she didn't know or came fromoutside her neighbourhood, she would not have accessed a loan.

Based on interview with Colleta Pingoti in Nancholi, Blantyre, April 02, 2015

Based on the evaluation report a decision was made to reduce the down payment to any amount from MK4,000. Immediately this decision became known, CCODE attracted up to 20 sanitation loan applications a month and increased training to meet the growing demand. The study found that CCODE's policy is to let households pay what they can afford until they finish paying off their loan. However, this has been problematic in that it only increases the loan amount that a household is supposed to repay. Table 4 shows a typical case where such policy is applicable.

The case above is the ideal case, where the loan amount is MK150,000, as it was in Blantyre and Mulanje by the end of 2014. The second case (Table 5) is a flexible one as it was at the same time with some households in Blantyre and Mulanje Districts.

While the reduction of the upfront payment is an incentive to households, the study has established that it becomes a burden in the long term. The flexibility applied to the scheduled repayments in order to accommodate poor households has affected the loan book of the sanitation portfolio. The study established that at least 80 per cent of households enjoying a flexible agreement make monthly payments equivalent to their initial payment all the time.

The flexible policy, therefore, has been a double-edged sword in that it increases the amount of money that households have to repay as a result of interest accumulation. Some respondents who have benefited from the flexible approach say that '*Ngongole ya CCODE siyitha*', meaning, CCODE loans are external and never end, since they barely cover the interest. Despite its noble social goals of increasing access to

Table 4. Ideal loan repayment and down payment at 8 per cent of the loan value of MK150,000

		Loan Amount	150,000.00	Input Values	
		First Payment Rate	8%		
		Interest Rate	4.00%		
		Number of Repayments	12.00		
		P	14,138.65		
YR	**PERIOD**	**PAYMENT**	**BALANCE**	**INTEREST**	**INTEREST PLUS CAPITAL**
Yr 1	0	12,000.00	138,000.00		138,000.00
Yr 1	1	14,138.65	123,861.35	4,954.45	128,815.80
Yr 1	2	14,138.65	114,677.15	4,587.09	119,264.23
Yr 1	3	14,138.65	105,125.58	4,205.02	109,330.60
Yr 1	4	14,138.65	95,191.95	3,807.68	98,999.63
Yr 1	5	14,138.65	84,860.97	3,394.44	88,255.41
Yr 1	6	14,138.65	74,116.76	2,964.67	77,081.43
Yr 1	7	14,138.65	62,942.77	2,517.71	65,460.49
Yr 1	8	14,138.65	51,321.83	2,052.87	53,374.70
Yr 1	9	14,138.65	39,236.05	1,569.44	40,805.49
Yr 1	10	14,138.65	26,666.84	1,066.67	27,733.51
Yr 1	11	14,138.65	13,594.86	543.79	14,138.65
Yr 1	12	14,138.65	0.00	0.00	0.00

Source: Epik Finance, 2015

sanitation by ensuring that the toilets are affordable, the flexible policy is a concern for some evaluators because evaluation of the effectiveness of the Fund is purely financial, the social benefits overshadowed by such terms as loan performance, which is generally a measure of timely repayments and ability to recoup invested capital. This has affected both the scale and sustainability of the Fund.

In another effort to make sanitation loans affordable, CCODE and the Federation have encouraged households to contribute more in the form of materials, for example, at least 4,500 bricks for construction of the foundation, vault and superstructure of the toilet, which saves approximately MK36,000, including transportation costs. They are also encouraged to contribute, sand, quarry and unskilled labour. If a household contributes all materials that are locally available, the sanitation loan would cover MK15,000 for the toilet builder; about MK36,000 for cement; approximately, 10,000 for iron sheets and pipes; and MK12,000 for wooden frames, doors and hinges. The study found that a household able to accumulate the materials locally would not need a loan of more than MK80,000 to have a standard ecosan toilet with bathroom. This represents about a 47 per cent reduction in the total cost.

Table 5. Flexible down payment table

YR	PERIOD	PAYMENT	BALANCE	INTEREST	INTEREST PLUS CAPITAL
		Loan Amount	150,000.00	Input Values	
		First Payment Rate	2%		
		Interest Rate	4.00%		
		Number of Repayments	12.00		
			3,000.00	Actual payments	
		P	15,060.74	Required Payment	
Yr 1	0	3,000.00	147,000.00		147,000.00
Yr 1	1	-	147,000.00	5,880.00	152,880.00
Yr 1	2	3,000.00	149,880.00	5,995.20	155,875.20
Yr 1	3	3,000.00	152,875.20	6,115.01	158,990.21
Yr 1	4	3,000.00	155,990.21	6,239.61	162,229.82
Yr 1	5	3,000.00	159,229.82	6,369.19	165,599.01
Yr 1	6	3,000.00	162,599.01	6,503.96	169,102.97
Yr 1	7	3,000.00	166,102.97	6,644.12	172,747.09
Yr 1	8	-	172,747.09	6,909.88	179,656.97
Yr 1	9	-	179,656.97	7,186.28	186,843.25
Yr 1	10	-	186,843.25	7,473.73	194,316.98
Yr 1	11	-	194,316.98	7,772.68	202,089.66
Yr 1	12	-	202,089.66	8,083.59	210,173.25

4.4 Sustainability of the CCODE sanitation financing model compared to other models of sanitation delivery

The study looked at sustainability of the CCODE sanitation financing model relative to other approaches. While sustainability is a buzzword in development discourse, the study adopted the definition of sustainable sanitation by Susana.org: 'in order to be sustainable a sanitation system has to be not only economically viable, socially acceptable, and technically and institutionally appropriate, it should also protect the environment and the natural resources.'[15] This definition adopts Bellagio Principles for Sustainable Sanitation developed by experts and endorsed by members of the Water Supply and Sanitation Collaborative Council during its 5th Global Forum in November 2000. These principles are as follows:

1 Human dignity, quality of life and environmental security at household level should be at the centre of any sanitation approach.

2 In line with good governance principles, decision-making should involve participation of all stakeholders, especially the consumers and providers of services.

3 Waste should be considered a resource, and its management should be holistic and form part of integrated water resources, nutrient flow and waste management processes.

4 The domain in which environmental sanitation problems are resolved should be kept to the minimum practicable size (household, neighbourhood, community, town, district, catchments, city).

[15] http://www.susana.org/en/about/sustainable-sanitation

In addition to these principles, the study used criteria for sustainable sanitation adapted from Bracken *et al.* 2005, which are provided in Table 6.

4.4.1 Criteria for sustainable sanitation

Based on the principles and the criteria highlighted above, the study found that the focus on ecological sanitation adds to the sustainability of the CCODE model. The sanitation loans made the toilets affordable to people who could not acquire them without loan financing. However, in terms of the Bellagio Principle number three, where sanitation waste should be viewed as a resource, CCODE seems to have put less effort into exploring various ways in which households can benefit from humanure and help recover their loan.

Further, the study compared the CCODE sanitation programme with the Water for People sanitation programme. Water for People like CCODE has a zero-subsidy approach with strong emphasis on sanitation marketing. Table 7 provides a comparison of the two programmes.

Table 6. Criteria for sustainable sanitation

CRITERIA	INDICATOR
Health	
Risk of infection from pathogens	Risk assessment or
Risk of exposure to hazardous substances	Qualitative
Environment	
Resource consumption (*land, energy, materials, water*)	(m^2, MJ, kg, L)/pe
Environmental releases to water, air, soil	(m^2, MJ, kg, L)/pe/yr
Resource conservation (*reuse, recycling*)	% of consumption
Impact on biodiversity, land fertility, natural systems	Qualitative
Compliance with environmental standards	Qualitative
Economics	
Affordability (*annual and capital costs, O&M*)	Cost/pe/yr
Willingness/capacity of users to pay	Disposable income/pe
Local development (*resources for O&M, reusable parts*)	Qualitative
Technical	
System robustness (*risk of failure, endure shock loading/abuse*)	
Durability/Lifetime	
Local competence for construction and O&M	
Local serviceability (*accessible parts, technical expertise*)	Qualitative
Ease of system monitoring	
Compatibility with existing systems	
Adaptability to user needs and environmental conditions	
Socio-cultural	
Perception of system (*importance, compatibility*)	
Institutional requirements (*policy, organizational structure*)	
Current legal acceptability	Qualitative
Acceptability in current local cultural context	
Convenience (*comfort, smell, attractiveness*)	
Ability to address awareness and information needs	

Source Bracket et al 2004

Table 7. Comparison of CCODE and Water for People sanitation programmes

		CCODE	WFP
Philosophy for sanitation		To build the capacity of the urban poor to meet their needs for sanitation services	To strengthen sanitation markets – both supply and demand
Approach	Federation members and non-Federation members are encouraged to borrow funds to build a permanent, hygienic toilet	Prospective sanitation enterprises are trained by Tools Enterprise and Education Consultants (TEECS) 2 local NGOs are used as community and household mobilisers to stimulate informed demand for sanitation, with choice based on HH economic situation	
Toilet designs offered	'Skyloo' – twin vault, above ground, urine-diverting, compost-producing ecosan toilet with attached bathroom	A variety, brochure displays 5 options 90% have chosen a VIP 10% an ecosan;	
Hardware subsidy	Nil	Nil	
Approximate current costs of toilets (MK) In September 2012	90,000 Skyloo with bathroom Loan maximum is 90% of total cost Average toilet loan to May 2012 was 72,000	Skyloos: 102,000; VIP with 3m depth pit: 92,000; Improved pit latrine: 48,000	
Lender	CCODE *Mchenga* Fund	Opportunity Bank of Malawi	
Loan period	24 months though borrowers encouraged to repay early	12 months	
Interest charged		1% per month on declining balance on first generation loans Likely to increase to 2% per month for second generation loans and thereafter	2% per month on declining balance
Default rate		Payments for toilet loans are 48% of scheduled (to May 2012) Have been hampered by members of loan groups being scattered	18% of borrowers are behind schedule
Social arrangements		Toilet loan groups, supported by Federation technical teams	Borrower groups and NGO, Hygiene Village
Maintenance		One vault emptied every 6 months or so by HH and compost used or sold	Pits are emptied by contractors using gulper equipment at a cost of MK3,500 per drum (200l) 405 emptyings as at June 2015
Project targets		1,000 toilets installed and in use by December 2013	No specific latrine targets; focus on building a strong sanitation market
Numbers of toilets built to date		152 in 18 months (8/month)	4,755 in 18 months (264/month)
External funding arrangement		CCODE has a 3-year grant from AWF for a total of €611,000 to support all aspects of the water and sanitation intervention	WfP is a sub-contractor to BWB, who has an EIB loan and EU grant to support 1. extending the water reticulation system into all areas of Blantyre and constructing kiosks; and 2. increasing sanitation coverage WfP contract is €1.064 million over 4 years
Continuity of arrangements	Ongoing, *Mchenga* Fund managed by Epik Finance	Opportunity Bank of Malawi stopped issuing loans in the absence of guarantee (WfP provided a guarantee of US10,000)	

Adapted from Etherington, A (2012): Mid Term Evaluation Report for Improving Access to Water and Sanitation for the Urban Poor in Blantyre City

Both CCODE and Water for People integrated a sanitation financing component although with different institutional arrangements. At the time of the study, the Water for People Programme had just wound up and Opportunity Bank of Malawi had stopped providing loans. CCODE continues to provide loans, some of which are revolving from the project that came to an end in September 2014.

4.5 Value for money and replicability of the CCODE model

In the simplest terms, value for money (VfM) looks at the extent to which an organisation such as CCODE has derived the maximum benefit from the goods/services it provides within the resources available to it. In assessing value for money, the study looked at how the loans provided by CCODE through the sanitation fund have led to the construction of more toilets above those initially funded and whether or not the organisation has managed to realise resources to support more low income people through the process. From this perspective, the study isolated specific cases where CCODE has managed to provide toilet loans to districts not funded by any donor.

In addition, the study sought to establish evidence of sanitation loan repayments from the Fund MIS. While the performance of the sanitation loans was not very impressive owing to changes in its operations, the repayment rate according to Epik Finance stood at slightly above 42 per cent at the end of December 2014. These repayments are ploughed back into the Fund to pay out more loans. In addition, the study through FGDs found that the loan processes at CCODE relied on local capacities, which were created over time. For example, the study noted that members of the sanitation teams and the new contractors started off as Centre leaders, supporting their colleagues and community members to access sanitation loans as well as imparting knowledge on use and management of the toilets. Most of the contractors said that they got involved with the sanitation loans in 2009. This means that new funding was used very much to strengthen systems and processes as opposed to building capacities; there was more value kept within the sanitation projects in terms of capacities in sanitation delivery.

In terms of scalability, the study found that the CCODE loan processes were adaptable in many contexts including in rural areas, where ecosan is also being promoted.

BOX 4. LESSONS FROM THE CCODE SANITATION LOANS

A number of lessons have emerged from the CCODE sanitation financing model:

- Poor people are willing to move up the sanitation ladder. Beyond the emphasis on sanitation marketing, practical solutions like sanitation loans can be used to complement improvement of sanitation outcomes. To deliver sanitation at scale using the financing model requires building local capacities, competencies and structures to facilitate access to improved sanitation. The local support yields social capital that takes care of informational asymmetries and ensures that interested households have important information on opportunities for enhanced livelihoods.
- CCODE sanitation loans to low-income households, backed by technical and product support, helps builds social capital. This package is not available in the private market and contributes to the development of a collective sanitation strategy that is promoted by the Federation, but which aims to be linked to community structures.
- Delivery of sanitation loans complemented by local-level community-based structures yields social capital that can increase the value of sanitation loans while reducing sanitation delivery costs.
- Transactions with politicians, as was the case with the Mulanje loans, need to be done with caution as they have potential to affect poor people and the quality/health of the loan book due to non-repayments.
- Bottom-up approaches in sanitation delivery need to be complemented with bottom-up systems. Where the systems for financing and reporting have been centralised, they affected timely loan repayment updates. However, evidence from places like Nkhatabay show that empowered communities can easily track loans and provide updates among themselves through their loan books. These initiatives can be scaled up to ensure that households do not just rely on Fund updates.
- Improved performance of the sanitation loan books has the potential to attract more funding into WASH. This means that institutions should work on ways to improve loan repayments. The use of technical teams and loan enforcement teams has proved worthwhile for CCODE as indicated by the increase in repayments/collections reported by the Fund. Organisations need to have longer-term plans to support such teams efficiently.
- Combining a toilet and a bathroom as a complete ecosan installation offers households more value for money besides holistically improving their hygiene activity. Thus while the loan size may look big, CCODE was actually providing two components- toilet and a bathroom.

5

Discussion of findings

5.1 Evolution of the CCODE sanitation finance model

The study has identified five generations of the CCODE loan financing model. It shows that the first changes to the Fund, particularly those associated with second generation loans, were motivated by the need to make the sanitation loans inclusive. The departure from a Federation-centric sanitation loan fund to a broad-based sanitation fund for all urban poor communities has helped CCODE to reach out to more households and move more of them up the sanitation ladder. In fact, according to the CCODE sanitation loans fund system, more non-Federation households have accessed sanitation loans than Federation members.

The former Community Liaison Officer at CCODE, who was responsible for compiling loan applications has said that at least seven in every ten loan applications he processed until June 2013, came from non-Federation members. This means that the first changes to the Fund have been more strategic in terms of increasing access to improved sanitation as well as attaining scale.

Meanwhile, the study noted that opening up of the Fund to the larger communities reduced focus on Federation households to improve their sanitation. Federation members had put their effort into improving sanitation in their communities, but made no deliberate effort to scale adoption within their membership. The study notes that there was no specific policy or measures to scale adoption of ecological sanitation among Federation households – only one project funded by DFID took place in northern Malawi's districts of Nkhatabay, Rumphi, Mzuzu, Karonga and Mzimba that encouraged all Federation leaders involved in the sanitation teams to construct ecosan toilets. CCODE and the Federation needed a deliberate policy to utilise its bigger membership base to scale ecological sanitation.

Where third generation loans are concerned, there was an elaborate structure to deliver sanitation to low-income households within the Federation. The clear division of labour among the teams ensured that there were checks and balances, which was in concert with the ideas behind the changes. The sanitation delivery teams came at a time when CCODE had more sanitation projects and needed an expedient way of responding to community demands. According to the then CCODE Water and Sanitation Programme Manager, it was easy to support the work of the teams because funds were available for technical support, including regular training, exchanges and coordination meetings.

The study found that there were a few funders who would provide support to the structures that had evolved to support the loans, and with time funds became depleted and the organisation was unable to effectively support such teams. Consequently team meetings became irregular and there was a lack of coordination. For example, due to the failure of the procurement team to liaise with the vetting, mobilisation and building teams, loans took too long to be processed. For the first time, CCODE started getting complaints from applicants who had made their upfront payments and procured some their materials but as much as three months had elapsed and there was no toilet in place.[16]

[16] According to interviews with Federation national leaders and WASH staff

BOX 5. THE CCODE FUND MANAGEMENT INFORMATION SYSTEM (MIS)

Although this study was not intended to assess the CCODE Fund management system, it is worth some discussion in this section because it has been a common denominator in all the five loan generations. The study notes that in all the generations, the management information systems (MIS) has been centralised and as such has failed to serve its purpose effectively. The participants in the study regretted the failure of the Fund MIS to provide timely updates on loan repayments, which affected their commitment to repay their loans on time.

Despite the evolution of the sanitation financing model, there have not been any meaningful changes to decentralise the Fund system so that anyone could easily get their loan schedules at the click of a button. The system is still centralised in Lilongwe and contractors, who also play the role of loan collectors, have to send hard copies of receipts to be entered into it. The cost of courier services are not covered. The contractors keep their loan records in hard covers that sometimes go missing. The failure of the Fund to provide real-time updates means the information it provides is mostly inaccurate; this includes information about the loan repayments, which makes people question the funder's effectiveness. As the MIS rarely captures all loan repayments, it may not be totally accurate that certain people do not repay their loans. In response to the challenges that come with centralisation of the Fund, the Federation is using loan books that are sold to everyone who has accessed the sanitation loan, and are updated every time a loan repayment is made So far, the system has worked mainly in Nkhatabay where loan beneficiaries say that they trust their loan books more than the loan information issued by the Fund. A decentralised MIS would better complement the loan books.

The absence of the teams has had a huge impact even on the performance of the sanitation loans. According to the then Fund Manager of Mchenga, when the teams were abolished, having helped to improve loan collection to the point where for the first in the history of the Fund the monthly collection rate was above 70 per cent, the collection rate plummeted to around 46 per cent.

The move to contractors solved the problem of bureaucracy that came with the now disbanded sanitation teams. Each contractor was a community mobiliser, a vetter, a procurement specialist, a monitoring officer and a loan enforcement officer. This fusion of roles needed individuals who were not just focused but had financial discipline. They were recruited from the sanitation delivery teams and trained in this new role.

Each contractor focused on their clients and received a 5 per cent payment for each toilet they constructed. This system, however also had problems. Some contractors lied about applications or got their friends to fill out application forms and misappropriated the funds. Monitoring visits by CCODE exposed these deceptions and CCODE increased its monitoring systems, ensuring that staff physically check all completed toilets and a completion form is filled out by the builder, the contractor and the toilet owner. There has been a move to incorporate Geographical Informational Systems (GIS) in the process but this is yet to happen.

Due to the restructuring at CCODE and the requirements of the law, the Fund was moved to Epik Finance. Contractors still play their role as before. Epik has restructured the Fund to make it sustainable through changes in the interest rate (changed from 2 per cent to 4 per cent per month), and the repayment period from two years to one. Although these changes are justified from a finance point of view, they have a big bearing on the social goals of the Fund. The study has found that the change to the CCODE-Epik collaboration has potential to improve loan performance but can also equally affect access to improved sanitation. Structuring the sanitation loans on purely market principles means that it will make it impossible to ensure universal access to improved sanitation as aspired to by the National Sanitation Policy (2008). However, there are improvements at CCODE and the Federation aimed at ensuring that the Fund, although under Epik, can still meet social goals.

The study also found that CCODE has integrated livelihoods projects in all its activities. This is a way of improving people's incomes so that they can afford sanitation options such as ecosan.

6

Conclusions and recommendations

The CCODE sanitation financing model presents a sanitation package that is innovative on several fronts. Social capital has played a catalytic role in spreading sanitation, which is enhanced by both technical and product support. Provision of these elements needs to be addressed in funding that goes to agencies such as CCODE that deliver sanitation, not just as a market product but as a solution that is grounded in community processes. The success of the CCODE sanitation financing model has rested on the role of the Federation in community mobilisation and social awareness. It remains relevant to strengthen the role of the Federation in sanitation delivery. It would still be important to re-examine the role of the sanitation teams, because, while they created some bureaucracy in the sanitation delivery chain, they provided quality checks and balances in the system.

Business approaches to sanitation loans are important to improve the sanitation loan book. However, considering that sanitation is mainly a social good and at times an economic one, it helps to rethink the evaluative criteria for performance from the perspective of social development. It is also important to understand that people targeted by these loans are those side-lined by the formal MFIs, and provision of loans to them is already an obvious risk. This study has shown that people are willing to pay for sanitation but are constrained by their economic circumstances (for example. the income ranges for the majority of people in the peri-urban areas is between 20,000MK and 100,000MK, a minimum wage being MK17,500 per month) (Kadewa 2014). It is important to find ways that can reduce the cost of the toilets, either through redesign or exploring alternative building materials.

Centralised systems cannot effectively support bottom-up processes. This is the case with the Fund MIS. The centralisation of the loan management systems has led to informational gaps that have crippled individuals' interest in repaying loans. From the study, the failure of the Fund MIS to provide timely and real-time loan updates is partly responsible for the Fund's poor performance, which at the time of the study stood at 52 per cent collection rate.

There is need to look at how sanitation loans can be flexible but able to balance the loan book. This would include expanding the sanitation loans to cover other technologies other than ecosan so long as they are within the thresholds of improved sanitation. In addition, there is need to explore innovative approaches that would ensure that loans cover core aspects of toilet construction. Economic principles such as inflation are important to consider when it comes to the designing of the sanitation loan products. The declining balance loan calculation method can be confusing to households, especially when their loan repayments are below their scheduled amounts, which can only lead to growth of the loan despite repayments. Formalising a fixed monthly repayment would make loan calculations easier.

Finally, while the CCODE sanitation loans have brought sanitation to numerous low-income households, delivering sanitation at scale in urban settings such as those discussed in the paper requires significantly more funding. Without further funding to provide and/or bring down the cost of sanitation, and to ensure that sanitation is available to the poorest, the public good qualities of universal sanitation will not be achieved. Nonetheless, financing that only provides for the hardware is not enough; finance for soft input that facilitates delivers sanitation is equally important.

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Appendix 1: Study methodology

The methodology of the study was mainly qualitative, with two aspects, key informant interviews and focus group discussions. The study also looked at key documents on CCODE's sanitation programme and the sanitation loans portfolio of the *Mchenga* Fund. The study limited itself to the loans that were processed between 2009 and July 2014.

In addition, the study reviewed sanitation approaches that also considered financing of hardware components in their programming. In this regard, the following organisations with comparable programmes were interviewed:

1.0. Water for People, which had implemented a sanitation project in Blantyre with a $10,000 guarantee to Opportunity Bank of Malawi to provide loans for sanitation.

2.0. Plan Malawi, in Mzuzu, which was intending to roll out a financing facility for sanitation through a financing institution.

The study involved 239 people based on their involvement as beneficiaries of CCODE sanitation loans and on their availability and willingness to participate. The Federation helped in identifying them and their names were cross-checked against CCODE *Mchenga* loan portfolio clients list. The areas targeted were selected because they have never had sanitation projects that specifically targeted their populations. The study areas were as follows:

- Lilongwe City
- Blantyre City
- Mulanje District
- Nkhatabay District
- Mzuzu City

The Table below shows the number of households and their respective categories based on the interviews:

Of the 239 people who participated in the study, 219 were engaged in FGDs and 20 in in-depth interviews. The KII included short interviews. The FGDs had between eight and 20 people per group. There were three facilitators for each FGD and at the end of each session they compared their notes. The key informant interviews targeted mainly Federation leaders who had been closely associated with the sanitation loans.

To compare various sanitation-marketing approaches, the study conducted interviews with groups that had accessed loans and held discussions with institutions such as Water for People and Plan Malawi in Mzuzu City. To map out the relationships between changes in the management of the loans systems and access to improved sanitation, the study relied on information

LOCATION	NO. OF PARTICIPANTS	MALE	FEMALE	FGDS	KII
Lilongwe	89	21	68	5	5
Blantyre	71	8	63	4	6
Mulanje	16	5	11	1	2
Nkhatabay	27	1	26	2	3
Mzuzu City	36	7	29	3	4
Totals	239	42	197	15	20

from the Fund and insights from the Fund management team. To assess the role of Federation social capital in the scaling up of improved sanitation in Malawian peri-urban areas, the study held focus group discussions to understand how social relationships leveraged intangible resources for the Fund.

To assess if changes in the loan management system had any effect on loan repayments, the study used the FGDs and key informant interviews with members of the loan enforcement team as well as an interview with the Fund manager. In assessing if the loan-financing model led to the sustainability of the CCODE programme compared with households that were directly subsidised by other projects, the study visited two projects, in Lilongwe and Blantyre, where subsidies were offered. Finally, to assess the impact of the model in relation to value for money and replicability and social sustainability and to identify key lessons in CCODE's loan financing model, the study sought insights from CCODE and other players in the sector.

The selection of these areas was based on the uptake of the loans and where CCODE sanitation projects had conspicuous achievements. This was important because the study also examined systems for delivery of the loans based on the CCODE model, and these areas were deemed to have inhabitants with the requisite institutional memory. The areas are also deliberately twinned in terms of city and district councils, to take into consideration the dynamics of the two geographically different areas.

To select the households to be interviewed, the study:

- Identified households, from the CCODE Mchenga Loan Fund data and with the help of the Federation leadership, who had accessed sanitation loans.
- Categorised the households based on the phase in which they got the loan. The study is aware of at least five phases in the CCODE loan management process: Phase 1 – where households, mainly Federation members, accessed loans through Federation centres. Phase 2 – where beneficiaries included non-Federation members who were supported by Federation centre members to access loans. Phase 3 – where beneficiaries utilised Federation teams to access loans. Phase 4 – where beneficiaries got loans through community contractors.[17] Phase 5 – where beneficiaries accessed loans from a financing company through community contractors. The sample was proportionate to the population that has accessed loans through a specific phase. Participants were interviewed based on the phase in which they accessed their loans.
- Consent was sought from all respondents before they are interviewed.

In addition, the study sought help from CCODE sanitation programme personnel and engaged with organisations that had implemented sanitation programmes in peri-urban areas in the last five years using various financing models.

[17] Community contractors (or as they are now called community construction facilitators, are Federation members who have been trained to manage construction projects

Like many other countries in the Global South, Malawi has failed to meet Millennium Development Goal (MDG) targets to improve access to sanitation. It has been estimated that only 25 per cent of the country's population has gained access to improved sanitation since 1990 and access to it is a meagre 41 per cent, according to the latest Joint Monitoring Programme (JMP) Report (2015). By utilising social capital and promoting ecological sanitation, CCODE (an SDI affiliate), has enabled thousands of urban poor households, who could not afford better toilets, to live a dignified life. This study shows that the CCODE model could do this for most of Malawi's urban poor.

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