



Embedding access to finance in sanitation programmes: a step-by-step approach





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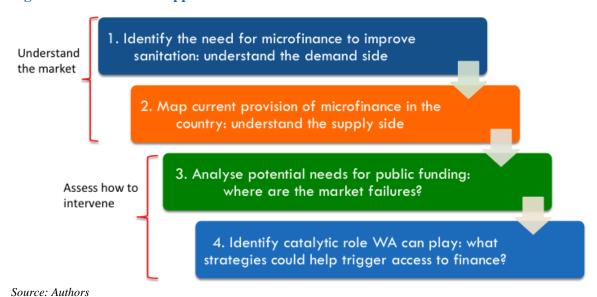
Executive Summary

The objective of this report is to support WaterAid (and other similar NGOs) with the development of a strategy for embedding microfinance into their sanitation programmes. This report has been tailored to WaterAid's specific position, as an NGO that supports programmes to boost access to water and sanitation through implementing partners and which conducts policy, research and advocacy activities to support broader water sector reforms at country level. As it was commissioned by WaterAid East Africa, the report focuses on the specific context for microfinance and sanitation in Ethiopia, Tanzania, Rwanda and Uganda.

Microfinance is increasingly considered as a key element in a public strategy to increase access to sanitation services. This is particularly relevant in the East Africa region given the prevailing policy context for public funding for sanitation, in which households are responsible for investing in their own facilities and only the sewerage system (serving a fraction of the population) receives hardware subsidies.

Although there is mounting evidence that embedding microfinance in a sanitation programme can contribute to increasing sanitation coverage, as proven by the experience in India, there is no "one-size-fit-all" strategy. Rather, each country strategy needs to be carefully built following a step-by-step approach, referred to in the present document as the "SanFin" approach (Figure E 1).

Figure E 1 - The SanFin approach



The SanFin approach is based on the principle that the success of any intervention to stimulate and support the market for sanitation microfinance relies upon taking into account country-specific specificities in terms of demand for sanitation microfinance and existing access to microfinance services and understanding where public intervention is most needed to boost the market. Based on this analysis, WaterAid should then review which roles they can play to trigger a market response.

The first step of the SanFin approach is to identify whether the lack of access to finance is a factor that is contributing to constraining household access to sanitation and to the limited development of related sanitation services, such as emptying. Microfinance can only be embedded into sanitation activities where and when demand for microfinance for sanitation is already identified. WaterAid may have gathered evidence for such demand through its own experience and/or commissioned research, or may wish to commission ad-hoc research to identify demand for sanitation services.

The second step is to assess the microfinance context, including policy, market size and the type of microfinance service providers, as well as the current development of the market for sanitation microfinance. Mapping out access to financial services in a country or region can feed into the design of well-grounded financing strategies, as this step can help localise regional and sub-country level specificities and take into account local modes of access to financial services. Generally, households and entrepreneurs have access to financial services via commercial banks, MFIs, SACCOs and ROSCAs, but also informal lenders (family members or moneylenders). In the East Africa region, access to formal financial services remains comparatively low, reaching only about 25% of the region's population. This means that the microfinance sector remains underdeveloped and usually needs support for venturing into the sanitation sector.

There can be several ways for WaterAid to improve its knowledge of the microfinance context. Information about the microfinance market is increasingly available via websites such as mixmarket.org. Specialised consultancies, such as the Kenyan-based MicroSave or other small outfits, can help conduct research and provide briefs to complement this information and carry out in-depth analysis to examine, more specifically, the current market for sanitation microfinance at national or regional level. National MFI network organisations such as TAMFI in Tanzania and AMIR in Rwanda can also assist WaterAid with an initial overview of the microfinance context in their country contexts and with forging contacts.

Although there are still very limited experiences with microfinance in the water sector, recent years have seen a surge of donors' interest in developing microfinance services for sanitation. There are therefore experiences in the East Africa region that WaterAid needs to familiarise itself with, as they hold lessons for future implementation (i.e. what has worked well, what has worked less well or not at all). WaterAid should seek to engage with other international organisations, such as Water for People, WASTE and Water.org, which have greater experience with sanitation microfinance and should be able to help identify relevant experiences and extract learning from these.

WaterAid can also learn from its own experiences, particularly in Tanzania, where it has facilitated access to finance for the gulper operators in Dar Es Salaam Tanzania. This experience has so far had limited results, as only four gulpers are in operation, after over four years of support. WaterAid should seek to analyse all factors that have contributed to this limited impact. WaterAid should also seek to build on the ongoing SHARE research, which has successfully generated microfinance institutions' interest for investing in sanitation, including for the gulper operators.

As a third step, WaterAid could seek to identify where public intervention is needed to boost the sanitation microfinance market. Reasons for market failure may include low demand for sanitation microfinance, reluctance of microfinance sector to engage with the sanitation sector, financial exclusion, etc. Identifying these factors requires in-depth local research, through interviews with NGOs involved in the sanitation microfinance market, local actors, MFIs and sanitation entrepreneurs, in a bid to understand where the market failures lie in the national context, i.e. which factors are contributing to the slow take-up of sanitation microfinance.

Having established that there is demand for microfinance and where public intervention is needed, there remains for WaterAid, as a fourth step, to determine which role they would consider playing, given the local context and the NGO's capacity in each country. Based on a review of what exists in each target country, WaterAid could choose to take on one or several of the following roles, either alone or preferably in partnership with others:

- Conduct further research in order to design strategies based on strong evidence;
- *Play an advocacy role* to influence public policy so that microfinance is integrated in broader sanitation programmes;
- **Provide technical assistance** to financial institutions willing to enter the sanitation sector;
- Act as a channel for funding through guarantees and revolving funds (not recommended for WaterAid, except on a pilot basis);
- Act as a channel for smart subsidies for building financial institutions' capacity.

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Abbreviations and acronyms

FI	Financial Institution		
FSTP	Faecal Sludge Treatment Plant		
MFI	Microfinance Institution		
SaaB	Sanitation as a Business		
SHARE	Sanitation and Hygiene Applied Research		
CBE	Community-based Enterprise		
ROSCAs	Rotating and Saving Association		
HI	Homeless International		
WfP	Water for People		
HACH	Human Advancement and Creative House Ltd		
WSP	Water and Sanitation Programme		
FDG	Focus Group Discussion		
SSSP	Small-Scale Service provider		

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1 Introduction

1.1 Report objectives

The objective of this report is to support WaterAid and other similar NGOs with the development of a strategy for embedding microfinance into their sanitation programmes. It is intended to serve as a quick introduction to the topic of sanitation microfinance, by explaining why it is important to consider how access to finance can be facilitated as part of a sanitation programme and how this can be done by international NGOs such as WaterAid, based on a step-by-step approach. This report has been tailored to WaterAid's specific position, as an NGO that supports programmes to boost access to water and sanitation through implementing partners and conducts policy, research and advocacy activities to support broader water sector reforms at country level.

This initiative stems from the growing consensus that the sanitation sector needs to shift away from seeing end users of sanitation services as "beneficiaries" and rather treat them as "customers", in order to make interventions more sustainable. In this context, "access to finance" increasingly appears to be a key part of the package of activities that can facilitate access to sanitation for millions of people. This report builds upon research carried out by the SHARE consortium over the last few years, which has mapped out and documented sanitation microfinance experiences and identified ways to incentivise the development of microfinance for sanitation markets. Underlying learning is also based on experiences by organisations such as Water.org, Water for People (WfP) or the Water and Sanitation Programme of the World Bank (WSP).

Microfinance for water and sanitation has generated a lot of interest in recent years. However, experiences remain at pilot stage, apart from in India where the microfinance sector in general is particularly developed. Therefore, it is important to adopt a cautious and incremental approach, building on lessons of successful programmes but also maintaining a critical eye on why and how access to finance for sanitation can be supported.

1.2 Background: the East Africa Regional workshop on sanitation microfinance

This report is based on a workshop organised by Trémolet Consulting in response to a request by WaterAid East Africa region. The workshop, entitled "Embedding microfinance into sanitation programmes", took place in Dar Es Salaam on 16th and 17th May 2014 and was co-funded by SHARE and WaterAid.

On the first day, the workshop gathered representatives from financial institutions operating in the region as well as NGOs, international organisations with experience in sanitation microfinance and key staff of WaterAid East Africa region (Ethiopia, Rwanda, Tanzania and Uganda). The second day consisted of a closed-door session for WaterAid staff in order to identify effective ways for the international NGO to embed microfinance into its sanitation programmes. Reflecting on learning from the previous day, WaterAid staff was asked to express its opinion on the potential of microfinance for supporting sanitation programmes and on potential challenges. This was also the opportunity for WaterAid to reflect collectively on its current experience with microfinance in Tanzania, which is its most significant one in the region.

A key objective of the workshop was to support WaterAid with identifying ways to adopt a more business-oriented approach to sanitation, including via strategies to facilitate access to finance for households and sanitation businesses. Through dissemination of the present paper, it is hoped that other WaterAid staff members can benefit from learning generated at the workshop.

1.3 Definitions

Access to finance as referred to in this report relates to the provision of microfinance services through microfinance institutions (MFIs), revolving funds and savings group schemes as well as credit schemes with the service provider. Box 1 below clarifies key concepts, and particularly the difference between microfinance and microcredit as used throughout this report.

Box 1 - Microfinance and microcredit

Microfinance often refers to financial services for low-income people offered by different financial institutions. The concept is commonly used to mean microcredit services offered by MFIs. However, microfinance also involves the provision of a broad range of financial services, including savings and insurance. Microfinance institutions use various methods, such as joint liability, advance cash deposits and group members' follow-up, to deliver and manage small loans to usually self-employed borrowers.

Other entities providing microfinance services are traditional banks, Savings and Credit Cooperatives (SACCOS) and solidarity lending groups, such as Self-Help Groups that are very prevalent in India. The type of institutions providing microfinance services varies greatly from country to country. Service providers themselves can be considered microfinance providers when they offer credit schemes to their customers. This form of microfinance is promising for the sanitation sector, although experiences so far have been very limited.

1.4 Report structure

Section 2 provides an introduction to the topic of sanitation microfinance and identifies why it is important to facilitate access to finance as part of the design and implementation of sanitation programmes. This section also describes some of the limited experiences in sanitation microfinance and shows that public intervention has a role to play in developing such a market, as a mean to achieve sanitation for all;

Section 3 presents the "SanFin" approach to embedding microfinance into sanitation programmes. SanFin is a step-by-step approach, which WaterAid (or other similar NGOs) need to go through to assess whether and how microfinance components need to be introduced into sanitation support programmes and activities;

Section 4 describes how WaterAid needs to establish partnerships in order to develop its approach to sanitation microfinance and provides options for different "levels of engagement".

In addition, *Annex A* provides the key references consulted for this report.

2 Why should access to finance be included into sanitation programmes?

Microfinance has a role to play to support demand and supply for sanitation products and services at two main levels:

- a) To support households with acquiring sanitation facilities;
- b) To enable small-scale service providers (SSSPs) to develop their businesses so as to respond to growing demand for their services.

Facilitating access to finance can support the adoption of a sustainable approach to sanitation, defined as follows:

- Impacts are likely to last beyond a specific intervention (e.g. households carry on investing into maintenance of sanitation facilities; sanitation businesses carry on offering products and services);
- Interventions are financially viable in the long run (i.e. these interventions do not solely rely on limited public funds, including from donors, but private investments are also leveraged); and
- Interventions are able to reach scale and move beyond piloting stage.

2.1 Supporting households

Sanitation is the most off-track Millennium Development Goal. The Joint Monitoring Programme (JMP) defines "improved sanitation" as the availability of individual (i.e. non-shared) facility, which ensures hygienic separation of human excreta and human contact. According to this definition, only 25% of the population on average has access to improved sanitation in Rwanda, Uganda, Ethiopia and Tanzania. This aggregate figure hides substantial discrepancies, however, with Rwanda presenting the highest rate of sanitation coverage (63.8%) whilst Tanzania has the lowest rate, with only 12% coverage.

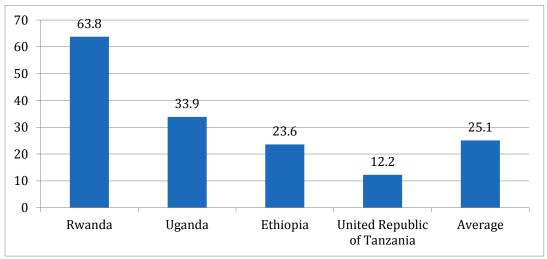


Figure 1 - Access to improved sanitation in WaterAid East Africa countries

Source: JMP (2012)

Households' limited financing ability is a key reason for such slow progress. As WaterAid's 2011 Sanitation Framework recognises, "the poorest and most marginalised are often unable to invest in improved sanitation". A study conducted for WaterAid in Dar Es Salaam (Tanzania) in 2009 found that the minimum cost of constructing a latrine reached 11% of a households' yearly income (Box 2).

Box 2 - The cost of building and maintaining a latrine in Dar Es Salaam

In Dar Es Salaam, the cost of constructing an improved latrine ranges between TZS 550,000 (USD 326) and TZS 750,000 (USD 444), depending on the choice of material. Small improvements to an existing latrine, by adding a vent pipe requires at least TZS 50,000 (USD 29). To empty their latrines, households usually use manual pit latrine emptiers, or "frog men", at an estimated cost ranging from TZS 27,000 (USD 16) to TZS 100,000 (USD 59) per visit. These costs represent a substantial portion of households' annual income. The latest figures on households' income in Dar Es Salaam indicate that the average household earns TZS 5.2 million per year (USD 3,082) (HBS, 2007). Constructing a latrine therefore represent at least 11% of a household average income. However, 16.4% of Dar Es Salaam population lives with less than TZS 14,000 (USD 8.2) a month per person, which corresponds to TZS 672,000 (USD 398) for a household of four per year. For these households, considered to live below the poverty line, constructing a latrine represent at least 82% of their income.

Source: (Trémolet and Binder 2013)

Increasingly, donors and governments are moving away from interventions solely based on hardware subsidies. Experience has shown that such interventions have failed to reach the poorest and to increase coverage¹. One of the main reasons behind these results is that they create "false demand" for sanitation, where people take up the subsidy to build or improve facilities but these end up unused because demand was not well established in the first place.

Moreover, such interventions are unrealistic considering the financing needs for the sector. The AMCOW Country Status Overview reports for Rwanda, Uganda Ethiopia and Tanzania estimate the required CAPEX to achieve national goals for sanitation to be, respectively, USD 38 million, USD 70 million, USD 795 million and USD 210 million every year.

In fact, in the four countries included in WaterAid's East Africa region, the prevailing public policy is that households are responsible for investing in on-site sanitation. Government funds for sanitation are nearly exclusively allocated to finance sewerage systems that only serve a fraction of the urban populations or to fund limited software activities (sanitation and hygiene promotion).

Therefore, more efforts need to be invested in identifying suitable financing solutions for households.

2.2 Supporting small-scale service providers (SSSPs)

To be effective, on-site sanitation facilities need to be regularly emptied and maintained, particularly in urban areas where there is limited space to dig new latrines. However, at present, only a small percentage of the faecal sludge that is emptied actually reaches Faecal Sludge Treatment Plants (FSTPs), when such facilities do exist. Faecal sludge that does not reach appropriate treatment facilities is simply disposed of in surrounding sites. Common practices include manual emptying – the sludge is either dumped near the latrines or in gutters at night – and flushing the latrines onto the streets during the rainy season. These practices cause serious environmental and health hazards. In Dar Es Salaam, for example, it is estimated that 70% of the latrines are flushed onto the streets while over 95% of the sludge which is manually emptied is dumped untreated into the environment (Trémolet and Binder 2013).

The inability (or unwillingness) of local governments and utilities to provide adequate emptying and transport services often mean that households rely on small-scale service providers (SSSPs) – private businesses or community-based organisations – to maintain their facilities. However, SSSPs are often constrained by the lack of appropriate equipment to perform their services and are often unable to respond to customers' demand due to lack of equipment. For example, in Dar Es Salaam,

¹ For example, the Total Sanitation Campaign in India, initiated in 1999 in rural areas, included the provision of hardware subsidies for households below the poverty line for latrine construction or improvement. Although there has been an increase in sanitation coverage in rural India (from 13.5% in 1999 to 24% in 2012 according to JMP data), the programme fell short of its ambitious target of sanitation for all by 2012. Furthermore, research indicates that factors such as social pressure (revolving around shame, embarrassment and pride) may have had a greater impact on a household's behavior than the provision of subsidies.

the community-based enterprise (CBE) UMAWA, which provides emptying services, is unable to meet the rising demand for its services with only one gulper vehicle.

Improving transport and treatment of faecal sludge therefore requires finding financing mechanisms to support the development of SSSPs.

2.3 Strengthening the sanitation supply and demand chain

In recent years, the Water and Sanitation Programme (WSP) has taken the lead in implementing sanitation marketing strategies in different parts of the globe, including through the "Selling Sanitation initiative" conducted in partnership with the International Finance Corporation (IFC). These strategies aim to increase demand for sanitation and strengthen private sector capacity to supply sanitation products and services. Interventions include market research on customer preferences, supporting individuals or communities in setting up sanitation shops, developing business models that can be attractive for customers and profitable for the enterprises. Sanitation marketing is conducted in conjunction with demand creation activities for sanitation products and services, through, for example, Community-led Total Sanitation (CLTS) approaches.

However, although these approaches have been successful at pilot stages, they have proved less successful in scaling up. These approaches, which rely on behaviour change to trigger investments in sanitation, are limited by some households' inability to provide the upfront costs associated with building sanitation facilities, however small. WSP's experience in Cambodia showed, for example, that interventions needed to be comprehensive and include "offering financing options to households to lift cash constraints" (WSP 2012).

Sanitation marketing and demand creation are crucial to build the sanitation supply and demand chain, but to achieve a wider impact, they need to be complemented by initiatives to facilitate households in accessing finance. Initiatives to help sanitation products and services suppliers access finance can also contribute to making interventions gradually sustainable and less reliant on donors' support.

To summarise, the East African context (including sanitation financing policies and service providers' lack of capacity) calls for greater inclusion of access to finance considerations within sanitation programmes. Such considerations should be part of broader efforts to strengthen the markets for sanitation products and services. Table 1 below presents where and how the inclusion of a microfinance component can strengthen the markets for sanitation as well as water investments.

Table 1 Where and how can microfinance strengthen (water and) sanitation markets?

End users of financial services	Type of infrastructure for which they need finance?		Potential financing instruments		
	Water	Sanitation			
Households					
	Household connections or water tanks	On-site sanitation facilities	 Microfinance mechanisms such as: Micro loans Savings and loans combined Group lending and solidarity mechanisms 		
Community Based Organisations (CBOs)					
CBOs, user committees, cooperatives, neighbourhood organisations and self-help groups	Upgrading, rehabilitation and extension of small piped networks/ point source operators	Management of public toilets e.g. latrine cleaners and O&M	Micro and mesofinance: Medium term loans (for community contribution to the investment and O&M management) Savings accounts, current accounts, short-term loans for repair		
Private Enterprises					
Small Scale Providers					
 Water kiosk operators & carters Latrine emptiers Masons, small construction companies 	• Small scale equipment e.g. gloves, carts, protective clothing		 Micro and mesofinance: Short term loans (working capital) Capital investment loans Leasing of expensive assets 		
SME Private Operators			Savings instrumentsCurrent accounts		
 Equipment suppliers Small water network operators (e.g. Aguateros) Small sewerage network operators Private land & housing developers 	Small water network operators (e.g. Aguateros) Small sewerage network operators Private land & Larger scale investments for equipment (as above) Distribution networks e.g. building small bore sewer network		Overdraft facilities		

Source: (Trémolet 2012)

2.4 Despite substantial needs, sanitation microfinance experiences remain limited

Experiences with microfinance for sanitation have been limited across the globe and in Sub-Saharan Africa in particular. A study by Meera Mehta for the Gates Foundation (2008) suggested that microfinance had been used in a number of countries (including Benin, Zambia, Uganda) for the construction of household latrines, manual emptying and the operation of suction truckers. Loans had been provided to households for investment in their homes (thereby reducing the burden of the initial cash outlay required to make such investment), to small-scale entrepreneurs or community groups for infrastructure investment or overall urban upgrading and shared facilities. However, the report found that these experiences had been very limited and that very few microfinance programmes for sanitation investments had achieved scale.

India, where the microfinance market is very developed, has the most significant experience with sanitation microfinance. A SHARE study conducted in 2011 identified that at least 146,000 toilet loans had enabled at least 730,000 people in India to build household sanitation facilities. A range of institutions had provided these loans, including NGOs, MFIs and non-banking financial companies. In several cases, many lending organisations started off as a NGO before initiating the process of turning into an MFI or creating a separate institution for lending only. The research also found that the repayment rates have consistently been very high (above 98% and frequently at 100%) for the experiences reviewed.

In many cases, the development of microfinance for sanitation has been the result of governments or donors' interventions to stimulate the market. In Vietnam, the World Bank and the Governments of Finland and Denmark provided a grant for seed money (USD 3 million) for a revolving fund for household sanitation investments and have achieved remarkable results. The fund, which was managed by the Women's Union, a pervasive organisation throughout the country with a long experience in micro-finance schemes, proved very successful and was scaled up through further World Bank projects and the Vietnam Bank for Social Policies. Combined with demand generation and hygiene promotion activities, the SRF helped around 200,000 households build sanitation facilities over the course of seven years. The revolving fund mechanism allowed leveraging household investment by a factor of up to 25 times the amount of public funds spent. Repayment rates are extremely high (almost 100%).

In India, the most successful lending schemes for supporting household sanitation have also received support from public intervention, through direct support from international NGOs or through a favourable policy environment for "social" lending. For example, the first water and sanitation focused MFI, Guardian, was spun-off from an existing NGO (Gramalaya) thanks to significant support from Water.org (in the form of "smart subsidies" and grants to cover operating costs). As of 2011, Guardian had provided over 10,000 sanitation loans in one district of Tamil Nadu (both in rural and urban areas). Another successful scheme in India is the Financial Inclusion Improves Sanitation and Health (FINISH) programme set up in 2008, through which 132,000 toilets loans were provided by 2011 and 300,000 by 2014. FINISH is implemented by local Indian NGOs, and had received initial support from the Dutch NGO WASTE. The programme has also received grant contributions from DGIS (Netherlands) and from the Bill and Melinda Gates Foundation. The overall Indian regulatory framework of financial services has also contributed to these developments, as microfinance institutions have been facilitated access to funds from commercial banks. In the late 1990s, the Reserve Bank of India issued a circular making lending to MFIs and Self-Help Groups part of the priority sector lending for the banks.

The rationale for donors' and NGOs' involvement to stimulate the sanitation microfinance markets is the leveraging potential from lending institutions. For Water.org, "providing support to Guardian has proven to be a very cost-effective way of boosting sanitation, thanks to a high leverage ratio. This means that each USD brought in by Water.org as a public funder leveraged approximately USD 16 in commercial funding" (Trémolet and Kumar 2013).

The success of these limited experiences in microfinance for sanitation indicates that microfinance may help accelerate access to sanitation (and water) for all and that public intervention played a key role in stimulating those markets. However, in order to maximise the impact of public intervention, assessing whether to intervene and defining which type of intervention is needed should be based on a careful evaluation of the local context. This requires a thorough assessment of the demand for microfinance products for sanitation (Is there such demand? Who needs such services?), as well as of the situation on the supply side (Who is providing financial services? Are there experiences in sanitation microfinance? Why are they limited?).

The following section provides a step-by-step approach for identifying whether and how to intervene to stimulate microfinance for sanitation, so as to provide a basis for assessing what role WaterAid should play in such an area.

3 How can access to finance for sanitation be facilitated?

Defining strategies and interventions to stimulate the microfinance market for sanitation requires the adoption of a step-by-step approach – hereby referred to as the "SanFin" approach - to identify where the need for microfinance lies on the demand side and, on the supply side, who the key players are and who potential partners could be.

Such an approach could be applied by an actor such as WaterAid when evaluating whether microfinance is needed to boost access to sanitation and if so, to identify how this can be done, either at country level or as part of the design of specific programmes. For simplicity, we therefore refer to WaterAid as the key agent that would apply the stepped approach outlined below. WaterAid country programmes could follow this approach to define the role they can play, depending on capacity, willingness and country context, to support this process. Figure 2 below presents the steps of the SanFin approach.

Understand the market

1. Identify the need for microfinance to improve sanitation: understand the demand side

2. Map current provision of microfinance in the country: understand the supply side

3. Analyse potential needs for public funding: where are the market failures?

4. Identify catalytic role WA can play: what strategies could help trigger access to finance?

Source: Authors

Figure 2 - Developing Sanitation Microfinance (SanFin): a step-by-step approach

3.1 Step 1: Understanding the demand for finance

Although there is strong evidence that, in many contexts, access to finance is a hurdle to the adoption of adequate sanitation facilities and the development of sanitation services, this may not be true everywhere. It is therefore necessary to start with a thorough analysis of demand for sanitation, in order to better understand the situation on the demand side: is the population aware of the importance of sanitation but unable to invest? Are awareness levels still low or are other behavioural aspects at work?

This assessment of the demand side can be based on WaterAid's existing knowledge of the sanitation markets in its countries of operations. For example, WaterAid Tanzania has already identified access to finance as a constraint for the development of emptying services via the gulper technology. In other countries, however, WaterAid may not have such a good understanding of the demand for emptying services as yet. As a result, it may not be clear whether financing is a key obstacle or whether other issues, such as the fact that an appropriate technology for emptying sludge at affordable levels for customers and profitable for enterprises is lacking.

If WaterAid does not have a good enough understanding of demand-side factors, it should review work that other institutions with interest and experience in sanitation microfinance have carried out. For example, Water for People has offices in Rwanda and Uganda. In Rwanda, WfP implements the Gates-funded Sanitation as a Business (SaaB) programme, which contains a microfinance component. In Ethiopia, the Dutch NGO WASTE has also been working on market-led solutions for sanitation, including through supporting microfinance. Reaching out to these organisations through workshops, meetings and other learning events could save crucial resources and help WaterAid grasp where access to finance is a key limiting factor for households and businesses seeking to develop sanitation.

Building upon WaterAid's current experience or reaching out to other organisations does not prevent commissioning ad-hoc research that would complement existing knowledge. Through the SHARE action-research on sanitation microfinance in Tanzania, for example, an in depth review of the financing model for the Gulper project was conducted (Trémolet and Muruka 2013). Findings from such research can help build an evidence-based strategy.

As a result of mapping out the demand side, whether financing capacity is among the factors of demand for sanitation (from collection services to re-use) should become apparent and therefore whether a strategy focused on facilitating access to finance to households and entrepreneurs may yield to an increase in sanitation coverage.

3.2 Step 2: Understanding supply: the local microfinance sector

Gathering a good understanding of the microfinance context

If demand for microfinance for sanitation has been established, the next step is to examine whether there is a need to trigger a market response from financial institutions so that they offer sanitation microfinance products. In other words, the key questions that need to be answered are the following:

- What is the status of the microfinance sector?
- Who has access to formal financial services?
- What are the future trends in terms of financial inclusion policies?
- Has there been any microfinance activity for sanitation?
- What are commonly cited reasons for MFIs not to get involved in sanitation
- Which microfinance system or modality could be used to facilitate access to finance for households and SSSPs?
- Which partner(s) to choose as provider(s) of microfinance products for sanitation?

Step 3 below examines in more detail the potential market failures that may have limited the development of microfinance for sanitation, even where there appears to be a strong need for it.

This step should help WaterAid form a good understanding of the microfinance sector in the country, including to understand patterns of access to financial services, the regulatory framework, the key players and their current involvement in the WASH sector.

Mapping out access to financial services in a country or region can feed into the design of well-grounded strategies, as this step can help localise regional and sub-country level specificities and take into account local modes of access to financial services. Generally, households and entrepreneurs have access to financial services via commercial banks, MFIs, SACCOs and ROSCAs, but also informal lenders (family members or moneylenders). In the East Africa region, access to formal financial services remains comparatively low, reaching only about 25% of the region's population on average, as shown in Table 2 below. This means that the microfinance sector remains underdeveloped and may therefore need support for venturing into the sanitation sector.

Table 2 - Main characteristics of financial services in the East Africa region

Country	Access to formal financial services	Financial Institutions	Existing networks	Limitations & trends for the near future
Ethiopia	n/a	 17 banks (3 state banks) 30 MFIs Limited member-based groups 	AEMFI www.aemfi- ethiopia.org	Limited private commercial sector
Kenya	42%	 50 banks 43+ microfinance services providers (two regulated MFIs) 5,000+ member-based groups 	AMFI www.amfikenya.com	Rapid expansion of mobile phone financial services and increased financial inclusion
Rwanda	33%	• 9 banks • 62+ MFIs	AMIR www.amir.org.rw	 Commitment at national level to support access to finance: government has set the target to achieve 90% financial inclusion by 2020 Potential growth of SACCOs and MFIs
Tanzania	17%	 29 banks 40+ microfinance services providers (two regulated MFIs) 	TAMFI www.tamfi.co.tz	 Stringent regulation on deposit-taking institutions Limited penetration of mobile money Rural livelihood and low density limiting sector growth Limited private sector financing
Uganda	20%	 23 banks 124 MFIs (10 regulated as deposit-taking) Multiple and unregulated SACCOs 	AMFIU www.amfiu.org.ug	 Members' organisations have weak management and control systems Limited private sector financing Growing access to mobile money

Source: http://datatopics.worldbank.org/financialinclusion and http://www.slideshare.net/SanFin-Tz

In the region, Kenya has the most vibrant financial sector, with 43 commercial banks and 50 MFIs and 42% of the population having access to formal financial services (including from MFIs) and strong private sector financing. In recent years, access to financial services has been on the rise with an expansion of bank branch networks, improved regulation of MFIs and provision of services through mobile phones. In Tanzania, there are 29 commercial banks operating, while there are about 40 microfinance service providers (but only two are regulated MFIs) and 17% of the population have access to these formal financial services. In Uganda, the microfinance sector is hampered by limited private sector funds: 20% of the population has access to formal financial services, mostly through member-based associations (such as SACCOs).

In addition, access to formal financial services is usually lower in rural areas, which may mean that the scope for using microfinance to increase access to sanitation in such areas is very limited. However, in rural areas, households may have other means of accessing financial services, via

informal group lending models or informal lenders for example. These households may therefore be willing to access formal financial services, if and when those are available.

Furthermore, there are modes of financial access that are predominant in rural areas, particularly informal group members' lending. There is great potential to build upon such modes of access to finance to develop microfinance for sanitation (and water) (Box 3).

Box 3 - Working with informal lending models in rural areas: the example of SEDIT in Tanzania

In Tanzania, the Social and Economic Development initiatives in Tanzania (SEDIT) is an NGO working on the establishment of "VICOBA groups" in rural areas. VICOBAs, or "village community banks" are member-based self-managed lending groups. SEDIT has recently received a grant from a Global Sanitation Fund programme implemented in Tanzania by PLAN International. Through this grant, it is currently implementing a sanitation and hygiene microfinance project in Dodoma, in coordination with sanitation marketing activities provided by MAMADO, a local NGO. SEDIT's intervention consists of training and influencing VICOBA groups so that they start saving into a "Sanitation Fund" which will enable lending to members for sanitation related-activities. Each VICOBA group has 30 members. A typical VICOBA group collects TZS 1,500 (USD 0.88) per person per week. SEDIT estimates that after four months, each group will have contributed 180,000 TZS (USD 106.1) towards the Sanitation Fund [this is based on 1500 * 30 = 45,000 * 4 months = 180,000 TZS]. SEDIT is looking to influence 261 VICOBA groups to contribute towards the Sanitation Fund, enabling the Fund to provide larger loans to members. SEDIT and its partners within the GSF programme are planning the construction of distribution centres, which will buy material in bulk and enable groups to buy material at reduced cost.

Source: SanFin-Tz Working Group Report

The regulatory framework for financial services to the poor is crucial to understand the microfinance context. Questions falling under the regulation of financial services include: what are the different types of financial institutions that provide financial services to the poor? What is the difference between these institutions? In Tanzania for example, microfinance institutions are tightly regulated as there are stringent conditions limiting financial institutions' ability to take on savings. Many MFIs therefore opt not to offer saving products. This means that, in Tanzania, there is limited scope for developing savings-based financial products for sanitation, whereby households are encouraged to save until they have enough to invest into a facility.

Another key consideration is whether financial policies and regulations encourage investing in the social sector. In India for example, in the late 1990s, the Reserve Bank of India issued a circular making lending to MFIs and Self-Help Groups (a kind of ROSCAs) part of the priority sector lending of the banks. This paved the way for the entry of bank funds directly to MFIs. This policy stimulated the growth of microfinance market in general.

To identify appropriate channels and partners, WaterAid should have a clear view of who the main providers of financial services are and where they operate. This mapping exercise should help identify which institutions are "profit-oriented" and which are non-for-profit institutions, i.e. more likely to consider "riskier" products such as sanitation-related financial products – as loans for sanitation (and water) are generally considered to be similar to consumer loans since they are non-income generating.

There are several ways for WaterAid to improve its knowledge of the microfinance context. Information about the microfinance market is increasingly available via websites such as mixmarket.org. However, this information only provides a broad picture such as access to financial services, who are the key players of the market and the regulatory framework. Specialised consultancies, such as the Kenyan-based MicroSave, can help conduct research and provide briefs to

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² Priority sector lending is a policy initiated by the RBI prescribing that a portion of bank lending should go for developemental activities, which include agriculture, small-scale industries, cottage sector, tiny sector, export sector, and other small business (service) firms. With this policy, private banks were assigned an important role in the economical development of the country (Trémolet and Kumar 2013).

complement this information and carry out in-depth analysis to examine, more specifically, the current market for sanitation microfinance at national or regional level. National MFI network organisations such as TAMFI in Tanzania and AMIR in Rwanda can also assist WaterAid in this research, by providing a good point of entry into the microfinance sector.

There are also national microfinance associations, such as the Tanzanian Microfinance Institution (TAMFI), which could be approached to gather information on the regulatory environment and the trends for the sector. Exploratory research, similar to the SHARE-funded research that looked at the situation of microfinance for sanitation in Kenya, India and Tanzania can also be commissioned.

Identifying local experience with sanitation microfinance

Another key step is to understand local experience with microfinance for sanitation. Although microfinance as a whole is little developed and there are still very limited experiences with microfinance in the water sector, recent years have seen a surge of donors' interest in developing microfinance services for sanitation. There may therefore be some experiences, albeit limited, in the East Africa region, which WaterAid would need to familiarise itself with, as they may hold lessons for future implementation (i.e. what has worked well, what has worked less well or not at all). WaterAid could seek to engage with other international organisations, such as Water for People, WASTE and Water.org, which have greater experience with sanitation microfinance and should be able to help identify relevant experiences and extract learning from these.

The key questions to answer are: which organisations have been providing microfinance for sanitation in the country? What approach (es) have they adopted? What are the results so far? In India, SHARE research found that several MFIs and NGOs were involved in sanitation, and had received support from NGOs looking to foster the development of the sanitation microfinance market. The research also found that some NGOs were providing microfinance services for sanitation and that one NGO (Guardian) had transformed into an MFI with support from Water.org. In Tanzania, the SHARE research found that there were limited experiences of microfinance for sanitation, only via small NGOs with no established systems or credit officers, which meant that these schemes had failed to be sustainable or to scale up.

In many countries, the development of microfinance for sanitation has so far been the result of interventions by international NGOs. It is therefore essential to identify who these key players are and what approach they have taken. Water.org, which operates in Kenya and Uganda, provides software support to MFIs so that they start providing loans for sanitation (and water). Homeless International (HI) has been channelling funds to a number of organisations around the world so that they provide loans for housing or home improvements. In Tanzania for example, HI has partnered the Centre for Community Initiatives (CCI), which has been providing loans for sanitation through the Jenga Fund, set up with support from HI. Other institutions such as the Water and Sanitation Program (WSP) play an important advocacy role to support the development of an enabling environment for market-based solutions (including financial) to the lack of access to sanitation.

This mapping of the supply side may quickly reveal a vast array of suppliers of financial services and bring about the question: how can potential partner(s) be encouraged to offer microfinance products for sanitation? With donors increasingly interested in supporting microfinance, including for sanitation, some NGOs have taken on the task to provide such financial services themselves. Traditionally, international NGOs such as WaterAid work closely with local NGOs and may therefore feel more "comfortable" dealing with NGOs, as opposed to a MFI, for example. In addition, many WaterAid staff may not have direct experience of MFIs and may hold preconceived ideas about MFIs and how they work. It is not uncommon to hear statements such as: "MFIs charge too much money", "we cannot put the poor in the hands of MFIs", "the poor don't have a regular income: how can MFI deal with them?" and these were indeed amongst some of the reservations expressed by WaterAid staff participating to the workshop. Although it may be true that with an average of 30% annual interest rates on loans, MFIs do not offer "cheap" financial services, the poor (and sometimes the very

poor) often borrow at much higher interest rates from informal lenders. However, MFIs employ business models that are specifically designed to provide financial services to the poor (Box 4).

Box 4 – Working with MFIs: what are the advantages?

There are many advantages of working collaboratively with MFIs to increase access to sanitation. MFIs reach geographical areas and populations that have traditionally been beyond the reach of formal banking systems and basic services. MFIs have developed a keen understanding of their customers' socio-economic background (including investment needs and cash flows). This relationship between microfinance providers and underserved populations can be leveraged to facilitate increased access to sanitation. In addition, microfinance providers have pioneered a range of innovative practices (such as social-collateral-based lending and doorstep collection), to ensure monitoring of the loan and enforce repayments. MFIs also have experience in client education. They often train their clients in financial management, accounting and other topics. Because of this background they are also well prepared to deliver education related to sanitation. Finally, MFIs provide access to capital as they are able to secure commercial and social capital from investors and deploy that capital to low-income households.

Source: (Water.org and MicroSave 2013)

3.3 Step 3: Potential needs for public funding: where are the market failures?

Despite the clear role that microfinance can play to support access to sanitation, its role has been relatively limited up to this point, which means that there might be a clear case for public intervention. It is therefore important to better understand what the barriers to the development of microfinance for sanitation have been. The answer to this question will help shape the potential area for public intervention in order to overcome potential market failures.

Market failures can be the result of different factors, which are often combined, such as:

- Demand for sanitation has not been established. As a result, households may not have the willingness to invest in adequate facilities;
- Financial institutions may not be familiar with the sanitation sector and may not be aware of the financing needs of the sector (and the potential market that sanitation may represent);
- The WASH sector, sanitation practitioners in particular, may have a limited understanding of the needs of the financial sector and may therefore not be able to fit within "bankability" requirements;
- The microfinance market may be weak overall and be affected by a lack of liquidity, i.e. financial service providers have limited capital to venture into different products and prefer investing in areas they know best;
- Households and would-be entrepreneurs may be excluded from financial services, for geographical reasons or because they are not aware that such services are available;
- Households and entrepreneurs may be already over-indebted and unable to contract further loans;
- The lack of enforcement for sanitation and hygiene practices means that households are not incentivised to invest into services.

There is a substantial body of knowledge among the WASH sector and within WaterAid about the level of demand for sanitation services, but less so about other potential market failures that may limit access to finance. This body of knowledge is slowly increasing. Water.org and Water for People in particular, are beginning to extract and disseminate lessons from their experience with sanitation microfinance. SHARE has also conducted a number of research studies on the potential for sanitation microfinance. All these studies have contributed to identifying possible reasons why MFIs do not explicitly include sanitation in their activities. Such reasons include:

- MFIs are not aware of the potential of sanitation as a market;
- Sanitation is perceived as being a high risk and low return market;
- The business case in sanitation is not strong enough, because sanitation investments do not necessarily generate an income stream to repay the loan;
- There is a lack of available capital, because sanitation has to compete with other sectors;

- MFIs do not want to burden themselves with the type of monitoring that would be linked to such loans; and
- There is a taboo element associated with sanitation.

This "general knowledge" of potential market failures should be complemented with in-depth local research, through interviews with local actors, MFIs in particular, and sanitation entrepreneurs, in a bid to understand where the market failures lie in the national context, i.e. which factors are contributing to the slow take-off of sanitation microfinance. Conducting household surveys may also help establish the factors of demand for sanitation services.

Market failures can also be the result of an inadequate regulatory and policy framework for financial services for the poor beyond the WASH sector. Governments can provide a supportive policy environment for the development of microfinance for social sectors. As previously mentioned, the development of sanitation microfinance in India (where 35% of the population has access to formal financial services) is related to developments in the financial sector as such, and the Reserve Bank of India's policy to make microfinance a priority-lending sector for commercial banks. In other words, Indian MFIs have been facilitated access to funds and are more able to lend for riskier or "non-income generating" activities — a situation which is not comparable to MFIs in most countries in the East Africa region.

In practice, limitations of the financial sector mean that opportunities to develop sanitation microfinance markets may be limited. In Ethiopia for example, where financial services are restricted, the choice of potential partners will be limited. In other contexts where the financial sector is more diversified but still weak, as in Tanzania, FIs may be reluctant to engage with a sector they are little familiar with. As a result, efforts to be deployed to stimulate MFIs' engagement with the WASH sector may have to be more significant and time-consuming.

3.4 Step 4: Identifying potential activities to support sanitation microfinance

Public interventions refer to public-funded activities, projects or programmes seeking to stimulate the market for sanitation. Figure 3 presents the potential roles that an external actor (government agency or NGO) can play to stimulate the sanitation microfinance markets in a given country or at international level. This section particularly identifies the potential roles that an NGO such as WaterAid could play to support the development of sanitation microfinance markets where it operates. The top row indicates the potential roles that provide the "best fit" for WaterAid current activities. The second row sets out potential roles that WaterAid could take on at a later stage, but which would require changes to its current strategy / positioning.

Figure 3 - Potential roles for WaterAid / public intervention



These roles are not mutually exclusive and can be conducted in parallel, depending on the country context and WaterAid's capacity. The choice of public intervention may also be dictated by other public activities (including from other NGOs) to stimulate the sanitation microfinance markets. In some cases, WaterAid could seek to complement or support activities undertaken by others.

Conduct further research

Research is an essential starting point, as microfinance for sanitation is usually still in its infancy: it represents only a fraction of the microfinance market. Although public interventions to stimulate the market have been on the rise, they still remain patchy and sporadic. Research should help understand where the needs are on the supply and demand side, so as to identify market failures and effective ways to support microfinance for sanitation.

WaterAid could seek to gather evidence on interventions that work or do not work via case studies. If more robust conclusions are needed, WaterAid could commission Randomised Control Trials (RCTs) to assess the impact of interventions that include a microfinance component, as this was done in Cambodia by the NGO iDE with interesting results (Box 5). Another crucial research area is to look into affordability issues, so as to better understand the impact of microfinance schemes on households' income and its consequences in the long run.

Box 5 - iDE research findings on microfinance in Cambodia

iDE is an NGO which has been involved in sanitation marketing in South East Asia since 2003. In Cambodia, from 2009 to 2011, iDE implemented the Sanitation Marketing Pilot Project, funded by USAID Cambodia MSMU Project and WSP. The pilot project facilitated the market for rural sanitation by training small-scale concrete producers in the production and sale of sanitary latrines. As a result, 17,424 unsubsidised pour-flush sanitary latrines were purchased by rural households in 11 districts of Cambodia.

In a bid to scale-up the programme (an initiative known as Sanitation Marketing Scale Up-SMSU - which is receiving funds from the Bill and Melinda Gates Foundation and the Stone Family Foundation and technical assistance from WSP), the NGO designed a research agenda to understand the triggers and barriers to the uptake of latrines by households. The key questions iDE sought to answer were:

- What is the uptake of latrines at different price points [the aim here is to understand the willingness to pay]?
- Do subsidies reduce eventual installation and usage of latrines?
- Does willingness to pay for latrines increase after the rice harvest?
- Does offering financing for latrines increase willingness to pay for latrines?

In order to answer these questions, iDE Cambodia partnered with IDInsight, a consultancy specialised in field experiments to gather evidence for programme design. The research was conducted using multiple methodologies, including RCTs.

The research found that a minority of non-latrine owners (between 3% and 20% depending on the context) was willing to pay cash for a sanitary latrine at its current market price of about USD 50 (despite iDE sanitation marketing efforts and the introduction of a range of "affordable" latrines, known as "Easy Latrines"). The research also found that the willingness to pay for latrines did not vary significantly by season and that large subsidies would be needed to dramatically increase latrine uptake.

The most interesting finding of this research was that offering financing solutions had a dramatic impact on the willingness to purchase latrines. The research randomly selected 30 villages to serve as study sample. These villages were then randomly assigned to one of two groups: cash on delivery (i.e. the latrine is paid for upfront, upon delivery of the product) or financing (i.e. financing solutions are offered to households to span the repayment over a period of time). These financing solutions were offered in partnership with VisionFund Cambodia. The MFI worked closely with the latrine sales team to ensure seamless coordination between sales and the approval and processing of latrine loans.

The findings from this RCT showed that only 12% of non-latrine owners were willing to buy a latrine for the market price of 50 USD with cash on delivery, but 50% of non-latrine owners were willing to purchase a latrine

at market price when offered a loan to finance the purchase. At the same time, due to significantly higher volumes of sales, offering financing solutions decreased operational cost per latrine by up to 70%.

The research concluded that given the low willingness to pay for latrines with cash, efforts to sell latrines at market price without any financing mechanism will lead to continued low penetration. The major implication of this study for programme design is that offering microfinance loans for latrines will dramatically increase uptake of latrines, while also making distribution significantly cheaper per latrine sold. "Large-scale efforts to offer financing packages for latrines should therefore be aggressively pursued in rural Cambodia" concluded the research paper.

Learning from this research has fed into iDE scaling up strategy. In a recent press release (dated June 2014), iDE indicated that 100,000 latrines (providing access to sanitation to 470,000 people) were sold in rural Cambodia in the last two years through the SMSU programme.

(Shah, et al. 2013) (iDE 2014)

Similarly, an important and not well-researched question is how to create stronger linkages with housing microfinance: can financial products for sanitation "piggy back" on housing loans, bearing in mind that investment in a toilet can be part and parcel of broader housing improvements? What can be learned from the development of the housing microfinance markets that could be applied to foster the sanitation microfinance markets? For example, in Tanzania, the initial SHARE-funded research found that a Housing Microfinance Working Group had been set up to help establish a community of practice in the area and act as a lobbying group for obtaining regulatory changes and mobilise public funding.

Box 6 – The potential for combining housing microfinance with sanitation microfinance

There are several arguments for integrating sanitation microfinance into housing microfinance. A first one is that sanitation investments (such as in latrines) may not be sufficiently attractive for households as stand-alone investments. In rural areas, in particular, emphasis on sanitation as a "stand-alone" product has sometimes resulted in awkward situations, where the stand-alone toilet is constructed with better standards than the house itself. A number of stakeholders therefore support the idea of financing sanitation investments via broader programs such as "housing microfinance" products. The second argument is that microfinance institutions may be more familiar or more comfortable with housing microfinance as the market is steadily growing in the developing world, and in East Africa in particular.

In Tanzania, a number of financial institutions recently started developing and promoting housing microfinance, partly with the support of the Financial Sector Deepening Trust, international donors such as the World Bank (which initiated in 2010 a 5-year USD 40 million project aimed at developing the housing mortgage finance market in Tanzania, including initiatives to foster the development of a housing microfinance market) or international NGOs such as Rooftops international. A housing microfinance working group was set up in November 2009 and gathers institutions that are interested in fostering the development of this market in Tanzania, including potential providers of housing microfinance as well as the Bank of Tanzania (Central Bank) and international NGOs. The working group placed its main outputs on a webpage (see: http://hmfwgtz.blogspot.com/), which contains a wealth of information about their activities and about the market as a whole. Membership is opened to any interested institution and free, in exchange for transparency about their products. As of July 2011, working group members have jointly provided no more than 2,000 housing loans (with an average value of TZS 1 million), whilst the potential demand is in the range of millions, the underlying idea is that members should not treat each other as competitors but rather seek to work collaboratively in order to develop the market.

Although housing microfinance holds potential for supporting households in acquiring sanitation facilities, there remains several unanswered questions, which targeted research could seek to answer:

• Should sanitation loans be promoted as a specific category of housing microfinance, or should they not be explicitly differentiated? Interviews with key members of the housing microfinance working group in Tanzania (Stephen Wanjala, founder and chair of the working group, and Tim Ndezi of CCI), showed that there are diverging views about whether sanitation microfinance could simply be seen as a sub-set of housing microfinance. While traditional microfinance institutions are not interested in promoting sanitation as part of the package, other organisations (such as CCI) see the need to incorporate sanitation specifically into the financing package;

- If sanitation microfinance is treated a sub-set of housing microfinance, how can it be ensured that new houses are constructed or improved so as to include an adequate sanitation facility? Can financing institutions be mandated to ensure that new constructions include a sanitation facility? How can building regulation be enforced?
- Will housing microfinance products target the same market segment as sanitation microfinance? The risk of putting resources into facilitating access to financing for sanitation via housing microfinance is that "better-off" households those who have regular monthly revenues, for example will benefit from these efforts as housing microfinance is bound to offer larger loan amount. A thorough study of the context for the housing microfinance market (including loan amount, targeted customers, repayment schemes) may indicate whether such efforts should be deployed.

Sources: (Trémolet and Muruka 2013) and World Bank's website

Other than commissioning research to consultants and researchers, *WaterAid could also organise learning workshops (with NGOs and international organisations) to share experiences and evaluate the best approaches.* For example, the East Africa workshop held in Dar es Salaam in May 2014, on which this report is based, allowed considerable sharing of experiences across the region. Such a workshop could be repeated in order to keep track of progress in this area and support the creation of a vibrant Community of Practice on this issue, at country, regional or global level.

Play an advocacy role to influence public policy

Based on learning from research, WaterAid could seek to influence public policies so that microfinance interventions can be fully integrated in broader sanitation programmes.

This advocacy role could be based on identified needs for reforming the regulatory environment of the markets for sanitation microfinance, both on the sanitation and financial aspects. For example, in Malawi, Water for People advocated for the adoption of a government policy on sanitation marketing. The objective of such intervention was to curb supply-driven approaches, which distort the demand for sanitation and jeopardize the implementation of demand-driven approaches. In addition, lobbying for a better enforcement of sanitation regulation may help consolidate demand for sanitation. Local governments have an important enforcement role, which could incentivise households to adopt adequate sanitation practices. However, local governments, due to lack of capacity, resources and the lack of prioritisation for sanitation activities, often fail to enforce regulations.

Central and local governments could be influenced through workshops and learning events, which could also gather sanitation practitioners together with microfinance service providers. This could encourage them to place sanitation microfinance at the heart of their sanitation policies and approaches, in the same way that demand promotion (CLTS) and supply-side support measures have already largely found their way into those policies throughout Sub-Saharan Africa and elsewhere.

Where governments have already decided to place sanitation microfinance at the heart of their sanitation policy, as is the case in Ghana, NGOs such as WaterAid or other organisations could support with the operationalisation of such broad policy statements.

Box 7 - Sanitation microfinance as policy in Ghana

In Ghana, where experience with sanitation microfinance had been limited to some inconclusive experience led by NGOs on a small scale, the Government of Ghana decided to incorporate provisions for sanitation microfinance in its Sanitation Policy alongside a strong support for CLTS to trigger behavior change and support for supply-side activities.

In this context, the NESSAP (National Environment Sanitation Strategy and Action Plan – adopted in 2011) recommended earmarking approximately USD 89 million to support the provision of 25,000 facilities per year over the initial phase over five years. The SESIP (Strategic Environmental Sanitation Investment Plan) was later prepared and provides detailed breakdown of costs and financing arrangements for the NESSAP. The SESIP assumed that the Government of Ghana will assign USD 35 million for the establishment of a revolving fund to be applied as loans to support the provision of household toilets through artisans and small-works contractors. Microfinance Institutions would manage the micro-credit schemes for the utilization of the revolving fund. The SESIP targeted the delivery of the equivalent of 50,000 household toilets per annum from 2011 to 2015 nationwide, mainly via the use of microfinance. Although the SESIP defined some basic terms for the loans to be provided under this microfinance programme, it remained silent about how the revolving fund would be operationalized. As a result, as of 2014, despite efforts supported from various organisations (including UNICEF, Agence Française de Développement, European Investment Bank or the Gates Foundation) to clarify how this institutionalized sanitation microfinance would work, this has still to be materialized.

Provide technical assistance to FIs on sanitation-related issues

WaterAid would be well placed to provide technical assistance to FIs on sanitation-related issues. The purpose of this intervention would be to create "sanitation champions" amongst FIs staff, by building their capacity to understand sanitation and raising awareness of the role of microfinance in increasing access to sanitation. As sanitation is a "fresh" issue in the microfinance sector, there is a great need to generate buy-in among microfinance practitioners and to familiarise them with the sector as a whole: what are sanitation services, who are the service providers, what sort of technologies are available, what are the financing needs in the sector, etc.

This can include the design and delivery of training on technical aspects of sanitation (including costs, service levels and maintenance needs), primarily aimed at credit officers. Training should also include tools for building demand for sanitation (i.e. what works as a communication strategy to trigger households to consider sanitation as an investment priority). These technical considerations will help FIs conduct their market research, design tailored sanitation microfinance products (if necessary) and devise their marketing strategies for those products.

Crucially, in urban settings, this technical support will provide MFIs with the ability to assess sanitation businesses. Prior to the SHARE-funded action-research in Tanzania, which focused on raising awareness among microfinance professionals about the business opportunities in sanitation, microfinance staff had very limited understanding of latrines emptying services. In practice, this meant that loan officers could not recognise any "business" in the "sanitation business".

As interest from MFIs for sanitation microfinance grows, public intervention may be needed to support FIs in carrying out their market research, which will help them define the products that will suit clients' needs. FIs will require support for identifying where demand for sanitation services lie, with activities such as producing the questionnaires that can be used for the market research.

In addition, FIs may be unfamiliar with the regulatory framework for sanitation services. An organisation such as WaterAid could help FIs with mapping the key actors, sector policies and funding flows. For example, it can help FIs identify relevant donor programmes, potential areas of

collaboration and sources of funding, such as grant funds for smart subsidies - i.e. for capacity building - and soft loans that will feed into their lending capital for sanitation.

Act as a channel for funding through guarantees and revolving funds

Mapping out exercises such as these may reveal that MFIs are very reluctant to engage with the sanitation sector, i.e. that they are not ready to take on the risk to venture in this market and therefore assign funds to these activities. This is a significant risk because MFIs typically have scarce capital available and there are multiple demands on this capital: as a result, they tend to allocate capital to less risky market segments where they already have substantial experience.

One option for public intervention would be to stimulate the market of microfinance for sanitation by intervening directly and injecting capital into the market. Public entities can provide seed funding for the development of revolving funds (as WaterAid has done in Tanzania to make funding accessible for gulper operators when negotiations with a commercial bank fell through) or provide guarantees to FIs so that they start offering financial services in the area of sanitation. Such interventions may result in a few loans being offered to households and entrepreneurs, but there are substantial limitations however, as explained further below.

Revolving funds set up with public funds may be suitable in context of high demand for acquiring sanitation facilities. In Vietnam, for example, the setting up of a "Sanitation Revolving Fund" for urban areas enabled about 200,000 households accessing sanitation between 2001 and 2008 (Trémolet, Kolsky and Perez 2010). In Thailand, revolving funds appear to have played a significant role in achieving 100% sanitation coverage in rural areas, where revolving funds at village level were combined with public funds for software to deliver radical improvements in sanitation coverage.

However, revolving funds, depending on their size, may take too long to be replenished, which would compromise the potential for scaling-up. This limitation is evidenced by WaterAid's experience in Tanzania. WaterAid placed TZS 10 million (about USD 7,000) in a revolving fund managed by local consultants HACH. They partnered with Harness Africa Ltd, a local manufacturing company, to adapt and develop the gulper pump technology, supply tricycles for transporting the sludge to stabilisation ponds or to the treatment plant. Two CBOs have taken on loans from the revolving fund to acquire gulpers. It was expected that the repayments from the CBOs will be used by Harness Africa to produce subsequent Gulper pumps hence the concept of the "revolving fund". However, in over four years, this revolving fund has only been able to finance the production of two gulpers to two CBOs in Dar Es Salaam, showing that such a set-up is not compatible with rapid scaling-up. As a city of 3 million inhabitants with dire sanitation needs, much more rapid scale-up of this sanitation emptying solution is needed.

Similarly, the provision of guarantees to FIs may secure the provision of financial services for sanitation services (including for the construction of latrines). This approach was adopted by WaterAid in Tanzania and Water for People in Malawi. However, such an intervention bears the risk that the FI will remain too reliant on the public entity providing the funds and will not "own" this new portfolio. As with the provision of seed funding for revolving funds, such interventions may not be sustainable on the long run and should therefore only be considered when there is a real need for demonstration projects to be undertaken.

Act as a channel for smart subsidies for FI capacity building

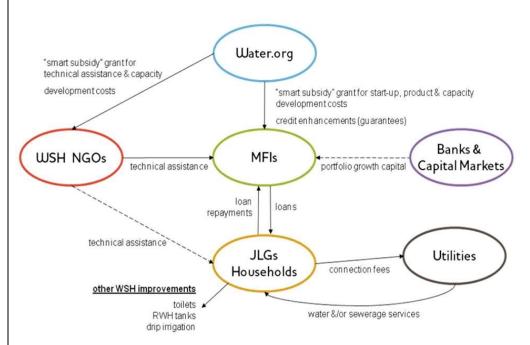
Public entities may intervene specifically to build the FI's capacity to "take on sanitation" as an integral part of their standard business. The objective of such intervention is to provide guidance to FIs on the design of financial products that will be attractive for customers (households and sanitation businesses) and generate enough revenues for the FI to continue with providing these services. This type of assistance should be provided by specialist institutions, with experience of introducing "new"

products to FIs. For example, the WaterCredit programme founded by Water.org was designed to channel smart subsidies to MFIs (Box 8).

Box 8 - The WaterCredit model

WaterCredit is a programme initiated by Water.org, which seeks to link microfinance institutions with households willing or able to pay for water and sanitation services. The approach is based on the recognition that some MFIs are interested in expanding their portfolio in scalable and sustainable ways. WaterCredit provides strategic expertise, or "smart subsidies", to help these FIs develop and deploy WASH-related loans. Figure 4 below summarises Water.org's support to MFIs via the WaterCredit programme.

Figure 4 - WaterCredit's support to MFIs



In *Kenya*, WaterCredit has been working with several MFIs, including Kenya Women Microfinance Bank and Equity Bank. WaterCredit has supported Equity Bank, Kenya's largest commercial bank (which also offers microfinance products) in developing the "Maji loan", a credit product for water-related investments (e.g. roofing and gutters for rainwater harvesting, water storage equipment, well digging etc.) and the "Jamii Safi loan", a product for sanitation investments (including construction or improvement of latrines and sewer connections). Equity Bank received support from microfinance specialists for conducting market research for water and sanitation to identify the needs. WaterCredit also provided assistance for building partnerships with suppliers and service providers. Equity Bank was also supported by microfinance specialists for the design of their financial products so that the price and the features are acceptable to clients, while financially sustainable for the Bank itself. In total, Equity Bank received USD 240,000 from Water.org.

WaterCredit has also supported several institutions in *India* so that they provide WASH loans in a sustainable way. The programme has helped with the creation of the first water-and-sanitation only MFI in India (and probably in the world), Guardian, which had disbursed 10,673 "toilet loans" between 2008 and 2011. The programme is also implemented in *Uganda* and has just started implementation in *Ethiopia*.

Source: Water.org and (Trémolet and Kumar 2013)

Although this type of role can be effective in focusing the minds of MFIs on sanitation, it may not be the core area where WaterAid, as currently set-up, can provide most support. Indeed, to do so, it would be necessary for WaterAid to have in-house microfinance specialists or excellent knowledge of the microfinance sector requirements.

4 Supporting the development of WaterAid programmes

By way of conclusion, this final section examines how WaterAid could adopt the SanFin approach outlined above to support the development of their programmes. In this section, we examine how WaterAid programmes can select the roles that they should play to foster the development of sanitation microfinance (if indeed, this is seen as necessary or as a positive addition to their existing programmes). We then set out how WaterAid could identify potential partnerships to deliver such roles and determine which role it would like to play in such partnerships.

4.1 What potential role(s) for WaterAid?

The SanFin step-by-step approach has identified a number of potential roles for public institution seeking to facilitate access to finance for households and entrepreneurs can play, including:

- Conduct further research in order to design strategies based on strong evidence;
- *Play an advocacy role* to influence public policy so that microfinance is integrated in broader sanitation programmes;
- *Provide technical assistance* to financial institutions willing to enter the sanitation sector;
- Act as a channel for funding through guarantees and revolving funds;
- Act as a channel for smart subsidies for building financial institutions' capacity.

As pointed out above, WaterAid in its current set-up is best suited to play the first three roles highlighted above, i.e. conducting (or facilitating) research, playing an advocacy role, and providing technical assistance to financial institutions.

Research efforts should particularly be focused on supporting innovation, including *technical* innovation (which can reduce the costs of building latrines or operating businesses) as well as *financial* innovation, which can help the very poor benefit from access to finance.

Where the SanFin approach leads to the conclusion that financial services providers should receive technical assistance and/or smart subsidies to engage with the sanitation sector, WaterAid can channel such assistance, especially via partner organisations: local NGOs for technical assistance on sanitation requirements or financial experts (e.g. MicroSave) for packaging the financial services adequately to sanitation.

If WaterAid was to build substantial in-house financing experience, the NGO could also consider acting as a channel for smart subsidies to build financial institutions' capacity. By contrast, in light of recent developments and experiences in sanitation microfinance (especially those documented by Water for People and Water.org), the role of funding channels (as in WaterAid Tanzania's experience with revolving funds for the gulpers) may not be so appropriate for an NGO like WaterAid.

4.2 At which level could WaterAid carry out such roles?

WaterAid could apply the "SanFin approach" outlined in the section above:

- To improve the design of a specific project or programme at country level;
- To support the design of a more strategic approach to supporting sanitation in a given country or at international level.

For example, in Rwanda, WaterAid has identified the need to support the construction of public toilets. The step-by-step SanFin approach could be used to assess whether microfinance can be used to support starting up public toilets as a business, and if so, how (e.g. by encouraging MFIs to provide

small loans to public operators so that they can improve the appearance and management of their facilities).

At the international level, WaterAid could carry out research documenting successful experiences with sanitation microfinance or examining how, in certain countries, a supportive Government policy has enabled the development of microfinance as a key strategy to boost access to sanitation (as in Vietnam, India or Ghana to different extents, and possibly in other countries as well). Based on such research, advocacy initiatives could be developed either at the level of international microfinance foras (to increase the visibility of sanitation as a sector that MFIs globally could get involved in) or in international sector foras (to highlight how microfinance can support meeting the SDGs).

Whichever roles WaterAid countries will decide to take, support at Headquarter level will be crucial for WaterAid countries to realise their aspirations. A stronger focus on microfinance (understood in its broad sense as defined in the present document) within WaterAid Global Strategy for sanitation should contribute towards orienting in-country offices to seek financing solutions for sanitation, which are financially sustainable and scalable. Direct support to WaterAid countries in the form of training, learning events and critical review of current experiences with sanitation will also be needed.

4.3 Developing a SanFin strategy in partnerships

All four steps of the SanFin approach require the development of partnerships. Potential partners could include:

- Business development partners that support sanitation enterprises in managing their businesses and present bankable projects to FIs;
- Implementing partners who provide financial services (NGOs, MFIs, SACCOs, etc.);
- Commercial banks, which could be incentivised to provide capital funds to these partners.

Other key partners could include local governments, who are often involved in transactions between FIs and households, especially in low-income areas. Local governments also have an enforcement role to play, which is essential to incentivise households to acquire adequate facilities and/or pay for emptying services.

Developing strategies for sanitation microfinance will require time and resources. This will also be required to forge partnerships and define common strategies with partners, as well as defining each other's roles. If WaterAid chooses to engage directly with FIs, it is likely that these FIs will have to be trained and supported in the development of their financial products for sanitation.

Global experience has shown that the choice of partners is crucial for the success of microfinance schemes. WaterAid could prioritise strategies where the FIs or communities (e.g. through ROSCAS) are in the lead in the provision of financial services. Experience has shown that projects have a better chance of yielding results, particularly in relation to loan repayments, when the NGO is less visible. In addition, strategies should be developed to create a sense of ownership for sanitation related-products among the FIs (or other providers of financial services).

A focus area could be the development of advocacy strategies so that governments and local authorities become real partners. Advocacy strategies should aim at inducing favourable policies for the development of sanitation markets in general and the provision of microfinance services in particular. At local level, authorities should support the SanFin strategy by ensuring that sanitation and hygiene laws are adequately enforced (particularly at the Local government level).

4.4 Identifying the most appropriate level of engagement

Depending on its capacity and willingness (including at HQ level), WaterAid can engage into microfinance-related activities for sanitation at different levels. WaterAid could either choose to lead or to collaborate and coordinate.

Lead

WaterAid could lead on the establishment of partnerships and programmes for supporting sanitation microfinance. This level of engagement is suitable in countries or areas where sanitation microfinance is at an infancy stage and where there is a need to comprehensively develop the market. Such strategy requires WaterAid to be able to develop competencies in these new areas, however, which would only be possible if WaterAid invested considerable resources in building its human capital in this area, both at headquarters level and at the level of country offices.

Collaborate and coordinate

WaterAid could seek to collaborate with organisations that are already leading microfinance projects. This level of engagement would be based on WaterAid's key areas of expertise (demand promotion, advocacy, awareness raising). For example, WaterAid's advocacy role on sanitation related policies is well established most countries of the East Africa region. WaterAid could enter in strategic partnerships with organisations such as WASTE, Water for People or Water.org, which already have made significant advances in countries where they are supporting sanitation microfinance. WaterAid could offer to provide additional support, through for example, taking on an advocacy role and influence governments and local authorities in the implementation of more robust sanitation awareness activities.

We would recommend that, at least in an initial phase, WaterAid identifies leading actors in sanitation microfinance (both at international and national levels) and seeks to collaborate with them rather than lead. Only once the organisation has acquired more experience in this area (and also if and when it is convinced that microfinance could play a role to boost access to sanitation) should WaterAid seek to lead the development of programmes in this area, particularly at country level.

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WASTE: The Guys are Extremely Liquid: https://www.youtube.com/watch?v=0m1IIIcaae8

MicroSave: Microfinance for Water and Sanitation: https://www.youtube.com/watch?v=nLmKFTjMhKM