cewas

Case study - Ghana

LRFP - 2021 - 9172173 - Evidence generation for KRC#8 Innovative Finance - Regional Revolving Fund for Sanitation

Wednesday, 5 October, 2022

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Glossary

CO: Country Office

RO: Regional Office

WCAR: West and Central Africa Region

OD(F): Open Defecation (Free)

BoP: Base of the Pyramid

(R)RFS: (Regional) Revolving Fund for Sanitation

CLTS: Community-Led Total Sanitation

BSF: Basic Sanitation Fund

DSF: District Sanitation Fund

FSP: Financial Service Provider

MFI: Micro-Finance Institution

FNGO: Financial Non-Governmental Organisation

RCB: Rural Community Bank

VSLA: Village Savings and Loan Association

MMDA: Metropolitan, Municipal and District Assemblies

DEHO/MEHO: District/Municipal Environmental Health Officer

HH: Household

SME: Small- / Medium-sized Enterprise

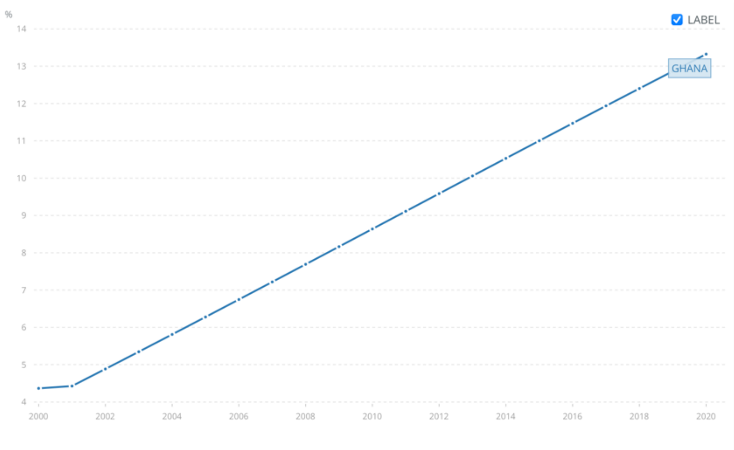
MSWR: Ministry of Sanitation and Water Resources

CSR: Corporate Social Responsibility

USD: United States Dollar

GHS: Ghanaian Cedis

Case study technical report



1. Introduction / Background

cewas has been engaged by UNICEF to conduct the assignment in April 2022 and aims to finalize it before the end of 2022. Over 3 months and leading up to this Technical Country Case Study, the team has developed an analytical framework and methodology as well as a set of guiding questions to assess the Regional Revolving Fund for Sanitation in West Africa, namely Ghana, Nigeria, and Togo. The team conducted secondary data analysis through a desk review, then collected primary data virtually through the CO reporting template, and finally conducted a Field Mission in each of the countries in June and July 2022, for interviews and site visits. This Technical Country Case Study is the result of the analysis of the findings from secondary, primary, and field visit information and data drawing a picture of the current functioning of the Regional Revolving Fund for Sanitation in Nigeria. The document presents an in-depth analysis of the RRFS in Nigeria and draws lessons learnt and conclusions for scaling the system piloted in 3 states to the country overall. Based on the Technical Country Case Studies for Ghana, Nigeria and Togo, a Regional Feasibility for scaling analysis will be developed and discussed through strategic discussions and feedback during a physical workshop planned to take place in November 2022 in Nigeria. A final step in this assignment, will be developing a business model for the regional deployment of the RRFS in WCAR.

This technical report analyses the Regional Revolving Fund for Sanitation for the case of Ghana and provides insights on how to scale the RRFS throughout the country to support the achievement of SDG6. The report will first provide a snapshot of the current sanitation situation in Ghana, as well as the key action to end open defecation and provide improved sanitation for all, including a map of the evolution of programs and actions taken by the government and several other stakeholders. Secondly, the relevance, effectiveness, efficiency, sustainability, and equity of the RFSS will be assessed, in order to draw lessons for a roll-out of the fund across Ghana and regionally.

The information in chapters 1 – 4 of this report has been presented and discussed with the Ghana Country Team at several stages and comments for the upcoming feedback process will be integrated during a review process to ensure the correctness of the data and findings of the final Technical Country Case Study.

2. Overview of sanitation and sanitation financing in Ghana

a. Sanitation situation in Ghana

In terms of the share of the population being able to access safely managed sanitation services, Ghana still lags behind: As of 2021, only 24% of Ghanaians were able to do so[1],

Figure 1 Sanitation Coverage in Ghana

[1] https://data.worldbank.org/indicator/SH.STA.SMSS.ZS?locations=GH

which is an improvement from just above 15% in 2002. Worldwide, the share has grown from 28.64% to 53.95% in the same period. The death rate as a result of unsafe sanitation in Ghana has sunk from 49.76 to 18.01 (per 100.000 people) during those twenty years[2], and the rate of people practicing open defecation tallies at 18%[3], still one of the highest in the world. It is important to note that just because a person is not practicing open defecation, this does not mean that the sanitation facility they are utilising is adequate and safe, and in addition, it might be shared between multiple households. Overall, Ghana is witnessing similar results as many of its peers among low- and lower-middle income countries. Conservatively estimated, the country still requires the construction of about 4 million latrines to achieve the SDG 6.2 target of universal access to improved sanitation by 2030[4]. This goes hand in hand with the absence of adequate wastewater treatment in the country – even if those latrines are built, a lack of treatment options would impede the success in achieving this target.

The Ghanaian government has been implementing a series of measures, especially throughout the past two decades, to improve access to sanitation and move towards definitively ending open defecation in the country. Notably, the country introduced its National Water Policy in 2008, followed by a National Environmental Sanitation Policy in 2010. In 2012, a dedicated Rural Sanitation Model and Strategy is adopted, and to streamline its water-related interventions even further, Ghana launched a dedicated Ministry for Sanitation and Water Resources in 2017 (previously this was covered under the Ministry of Water, Works and Housing).

While those policy measures provide bedrock for improved sanitation interventions in Ghana, the reality on the ground still indicates that there is a long way to go: besides construction flaws and logistical difficulties in accessing qualified contractors for toilet construction and suitable material, especially in remote rural areas, households also struggle to qualify for and repay traditional loans, the interest rate for which amounts to around 26% - 40%[5] per annum - a staggering sum for a low-income family, who often works on a day-to-day income from informal employment. Banks and traditional financing institutions also implement high benchmarks to qualify for a loan – most of the underserved households who still lack sanitation facilities would likely not be considered as a potential client due to their limited purchasing power and perceived creditworthiness. Additionally, rapid urbanisation has made shared toilet facilities, particularly in slums, excessively common, which are usually not considered improved sanitation options. As of 2018, around a third of Ghana's urban population lives in densely populated slums[6] and thus likely uses shared facilities, which opens up challenges in terms of security, maintenance, hygiene and accessibility, particularly for women, children, the elderly and persons with disabilities. This is exacerbated by unreliable water supply.

This report will draw on information collected pertaining to Wa West, Mion, Yendi, Gari, Kpandal, East Gonja, Kadjebi, Ajumako, Enyan Essiam (AEE), Tamale, Ashaiman, Ho, Cape Coast and Komenda Edina Eguafo Abirem (KKEA), the areas where the RRFS has been implemented thus far and – partly – where primary field research has been conducted. To meet varying needs in urban and rural areas, who face pronounced differences in terms of access to infrastructure, availability of SMEs and material, and financing options, the RRFS in Ghana distinguishes between the Basic Sanitation Fund (launched in 2018 for urban areas), the District Sanitation Fund (launched in 2019 for rural areas) and the

[2] https://ourworldindata.org/sanitation
[3] https://data.worldbank.org/indicator/SH.STA.ODFC.ZS?locations=GH
[4] https://www.unicef.org/ghana/press-releases/new-loan-scheme-improve-household-sanitation
[5] https://www.unicef.org/ghana/press-releases/new-loan-scheme-improve-household-sanitation
[6] https://data.worldbank.org/indicator/EN.POP.SLUM.UR.ZS?locations=GH

Social Fund (launched in 2019 for base of the pyramid beneficiaries at the very bottom of the earning scale that would not qualify for a loan), the first two of which will be the focus of this report.

b. Evolution Map

The RFS in Ghana builds on nearly a decade of experience of programs working to promote sanitation and end open defecation led by UNICEF, the Government of Ghana, and partners. Despite progress on reducing open defecation, access to improved sanitation remains limited in Ghana. It has already become clear that Ghana will likely not reach the SDG 2025 targets, the status quo is unsustainable and urgent measures must be taken to offer improved and sustainable sanitation solutions to everyone. Innovative financing mechanisms and stronger involvement of the private sector are especially crucial, as development finance is not conducive to building a sustainable sanitation sector.

Ending open defecation is a complex endeavour that requires awareness, behavioural change, availability of skills and materials as well as financing mechanisms. Collaboration of stakeholders at all levels and from different sectors is decisive for the success of driving such change, namely policymakers, local community leaders, financial entities such as banks, MFIs and others, Civil Society Organizations and the business sector, construction companies and SMEs to implement. These actors are embedded in local ecosystems, operate according to existing policies and programs, and create initiatives and platforms, that can define the success of a mechanism such as the RRFS. The below Evolution Map provides full overview of the ecosystem in which the RRFS operates in Ghana and fosters a clearer understanding of the key success factors in place as well as potential gaps in the ecosystem that could be addressed to scale the RRFS.

While current trends indicate that it will be unlikely to reach SDG Goal 6.2 by 2030, the Ghanaian government and stakeholders have set out to work towards its achievement through the following measures:

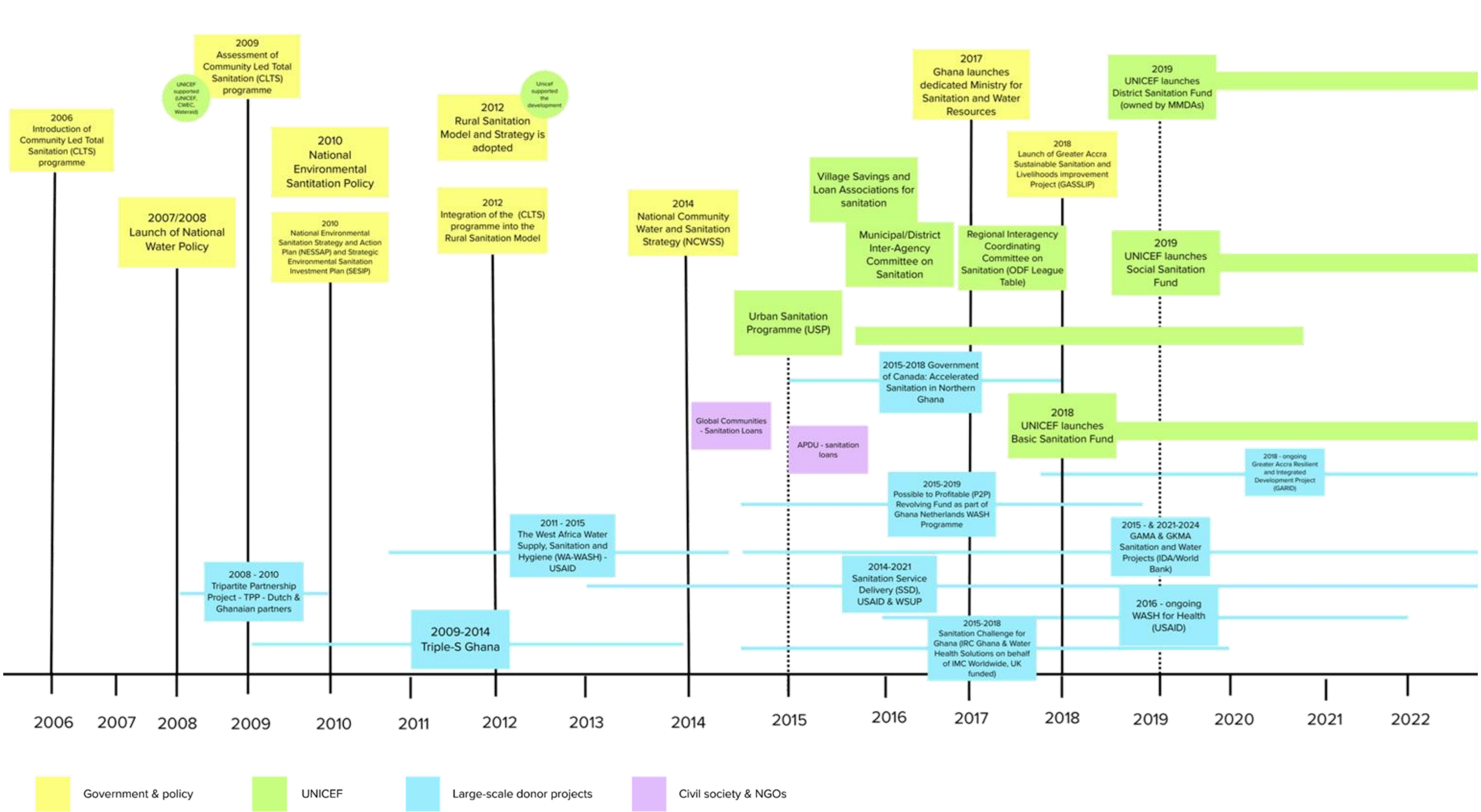
- As of **1993**, the Ghanaian government has been pursuing a decentralisation policy to shift the responsibility over sanitation reform, among other infrastructure matters, to the 110 MMDAs in the country[7]. This means that policymaking and monitoring occur on a national level, but implementation and service delivery is led and implemented locally.
- In **1994**, the Community Water and Sanitation Division was launched as a semi-autonomous division of the Ghana Water and Sewage Corporation (GWSC), becoming the fully independent Community Water and Sanitation Agency (CWSA) in **1998**. The state-owned Ghana Water Company Limited (GWCL) is in operation as of **1993**. The latter oversees urban water supply, whereas the CWSA supports MMDAs in rural communities.
- Ghana launched its Environmental Sanitation Policy in **1999**, and consolidated a National Water Policy in **2008**, which focuses on: (i) water resources management; (ii) urban water supply; and (iii) community water and sanitation. Further, Ghana voted in favour of General Assembly resolution 64/292 of July 2010 which "recognizes the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights."[8]
- As part of the National Environmental Sanitation Policy (NESP), which was revised in **2010**, Ghana introduced two key policy items related to achieving better sanitation: the National Environmental Sanitation Strategy and Action Plan (NESSAP) and the Strategic Environmental Sanitation Investment Plan (SESIP, 2012), which guides on the projected costs of these interventions. These documents are designed to guide the activities of Metropolitan, Municipal and District Assemblies (MMDAs) across Ghana. The SESIP also introduces the concept of a revolving fund for sanitation management.

[7] E. Appiah-effah et al. | Ghana's post-MDGs sanitation situation: An overview Journal of Water, Sanitation and Hygiene for Development, in press, 2019
[8] https://www.amnesty.org/en/wp-content/uploads/2021/05/IOR4013802015ENGLISH.pdf

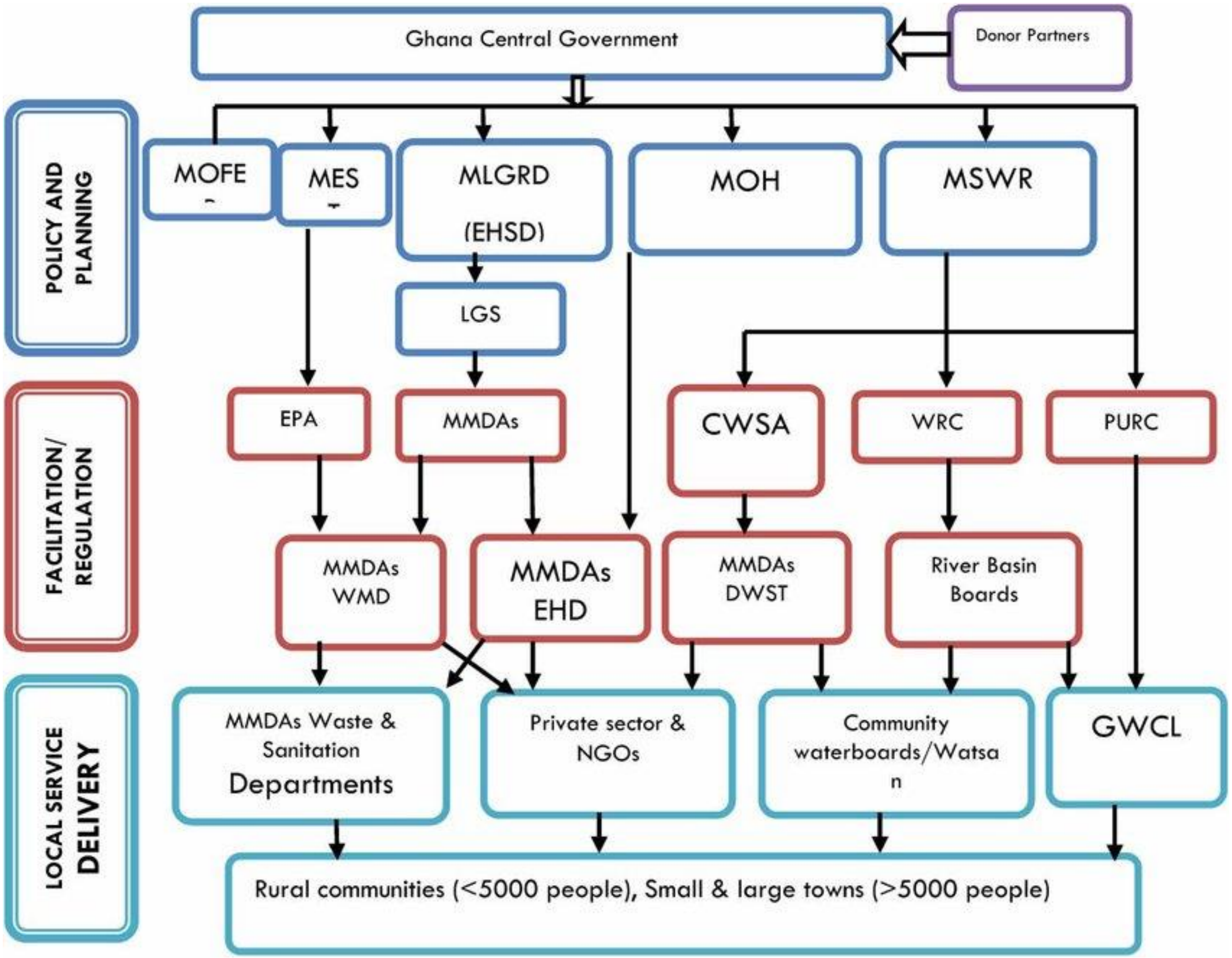
- The National Community Water and Sanitation Strategy (NCWSS) was launched in **2014** with the aim of increasing "the effective and sustained use of improved community water and sanitation services in rural communities and small towns".
- The Ministry of Sanitation and Water Resources was established in **2017**. Prior to this, responsibility for the water sector fell under the Ministry of Water Resources, Works and Housing, while the sanitation sector was part of the Ministry of Local Government and Rural Development. This includes a dedicated Directorate for Sanitation.
- In **2001**, multiple NGOs and civil society actors joined forces to better advocate for improved sanitation under the Ghana Coalition of NGOs in Water and Sanitation (CONIWAS), which "works in partnership with sector players to influence policies, remove barriers and promote access to potable water, sanitation and improved hygiene for the poor and vulnerable."
- Introduced in **2006** in partnership between the Community Water and Sanitation Agency (CWSA), Plan, UNICEF and WaterAid, piloted as of **2007** and integrated in the Rural Sanitation Model as of **2012**, Community Led Total Sanitation (CLTS) has played a measurable role on the road to eliminating open defecation in Ghana, as over 2000 communities have been declared ODF as of 2021[9]. The initiative focuses on a selection of regions, namely Upper East and West, Northern, Volta and Central.
- A number of events and conferences focused on the sanitation sector have been running in Ghana for the past years. Notably, these include the Mole Conference series, which started in the **1990s** as a multi-stakeholder annual platform in the Water, Sanitation and Hygiene (WASH) sector, the National Basic Sanitation / CLTS Stocktaking Forum which ran from **2011-2019** (paused in 2014), the National Environmental Sanitation Conference (NESCON) which was last held in **2010**, the annual Beyond the Pipe Forum organised by Safe Water Network since **2014**, and the Ghana Water Forum (last held in **2013**).
- A notable sector-spanning multistakeholder initiative is the National Level Learning Alliance Platform (NLLAP), which is hosted by the Ghana WASH Resource Centre Network (RCN) and aims to create opportunities for learning and exchange between sector actors through monthly meetings. The NLLAP has been held dozens of times since its launch in **2011** and is complemented by District- and Regional-level Alliances.

[9] https://aquaya.org/the-challenges-of-sustaining-open-defecation-free-odf-communities-in-rural-ghana/

The Evolution Map of Ghana's sanitation sector below shows how the sector and a selection of different interventions, policies and projects have been creating growing bedrock for the functioning of the RFS in the country.



Overview of WASH sector actors and responsibilities in Ghana[10]



[10] Oduro-Kwarteng, S., Monney, I. & Braimah, I. □□□□ Human resources capacity in Ghana's water, sanitation and hygiene sector: analysis of capacity gaps and policy implications. Water Policy 17 (3), 502–519. http://doi.org/10.2166/wp.2014.293

c. Sanitation Funds in Ghana

Having had an overview of other initiatives in the sanitation and sanitation financing sector, it becomes clear that several sanitation financing options are available to Ghanaians and in addition to the 7% set aside fund for Sanitation, under which the current RRFS is managed.

These include:

- Out-of-pocket payment, which is often only feasible for higher income quintiles;
- Commercial loans, which often have high interest rates between 26-40% per annum;
- Joining a VSLA to benefit from the pooled money;
- Informal lending agreements between friends and family.

A number of donor-funded IO/NGO programmes have driven forward Ghana's sanitation sector, as outlined in the Evolution Map above. Some of these focus on the awareness-raising or triggering side, but some such as the P2P programme or the Sanitation Challenge Ghana work around innovative financing mechanisms. In addition, the Government of Ghana has been involved in a selection of initiatives to shape the WASH situation in the country. These include:

Project	Partners	Financiers	Fund amount (Mio USD)	Duration
Greater Accra Sustainable Sanitation and Livelihoods Improvement Project (GASSLIP)	MSWR	GoG, World Bank, African Development Bank	49	2017 - 2022
Accra Sewerage Improvement Project (ASIP)	GWCL, MSWR	GoG, African Development Bank	155.04	2007 - 2016
Greater Accra Metropolitan Area Sanitation and Water project	GWCL, MSWR	World Bank	65	2013 – 2020
GPOBA - Greater Accra Metropolitan Area Sanitation and Water Project	GAMA-GPOBA	World Bank - Global Partnership for Results-Based Approaches (GPRBA)	4	2015 - 2018
Greater Accra Resilient and Integrated Development (GARID)	Ministries of Works and Housing, Sanitation and Water Resources, Zongo Development and Local Government and Rural Development	GoG	200	2018 - ongoing

3. Regional Revolving Sanitation Fund

a. Objectives of the RRFS

According to UNICEF Concept Notes, the RFFS aims to:

- **End open defecation and create demand for sanitation**. The Sanitation Marketing activities were targeted at complementing the Community Led Total Sanitation (CLTS) campaigns in the focus regions to provide durable and affordable improved sanitation options that will guarantee dignity and improved living conditions.
- **Business Expansion by high-performing SMEs**: Under the Basic Sanitation Fund, the Sanitation Pool fund set out to provide active SMEs access to loans for expanding their businesses, ultimately contributing to increasing the number of household toilets.
- **Increase access to improved sanitation, and hygiene services for vulnerable people**: The inclusive designs of improved toilets would ensure that access for people with disability would be ensured, whereas loans to the poorest of the poor at lower interest rates would be agreed with FSPs. The Pool Fund will provide cheaper access to finance households improved toilets and to re-pay instalment for households who cannot afford the full cost of improved toilets up front.
- **Improved livelihood through sanitation-based income generation and business development support**: The SanMark value chain will facilitate sanitation focused income generation activities thereby creating employment at various levels of the chain such as material providers, businesses, SMEs, Sales Agents, and hygiene promoters.

The below analysis will take into consideration the objectives set out for the RRFS and draw recommendations for further development and scaling.

b. Functioning of the RRFS

Based on various surveys and practices, the RFS builds on the need for innovative financing solutions for the Households interested in improved toilets but that are not able to pay them in one or afford the interest rates of a commercial loan, and for SMEs who wish to expand their capacity for business. A loan at a preferential interest rate offers an adequate solution. UNICEF and partners have now tested the RFS in a limited number of districts to gather experiences, lessons learnt and to improve and scale the RFS for maximum impact.

Summary of the RRFS functioning

The RRFS (also sometimes referred to as the UNICEF Sanitation Marketing and Financing and Sanitation Revolving Loan initiative / the 7% set-aside fund for innovation / Sanitation Pool Fund / Sanitation Revolving Fund and others), is a mechanism that starts with UNICEF and donors such as the Government of the Netherlands and the Government of Canada collaborating with the Government of Ghana and contributing funds to a joint Sanitation Fund that is administered by two Fund Administrators, ARB APEX Bank (BSF) and Rufinlit (DSF). The UNICEF Ghana team has streamlined three different approaches to make sure that the RFS can meet a range of target beneficiaries' specific needs and has the required mechanisms to function in both a rural as well as an urban context. The Basic Sanitation Fund (BSF) targets urban areas and provides funds to both households and SMEs, while the District Sanitation Fund (DSF) implements a cashless system that provides vouchers to HHs who then hire SMEs. A third mechanism, the Social Fund, targets those HHs that have no means to qualify for any type of loan[11].

[11] The Social Fund will not be covered in detail in this report, although it is notable as it adds an equity component to the RFS.

Launched in 2018, the RFS in Ghana currently covers 13 districts. Ahead of setting up the RFS, CDC Consult Ltd. did an assessment of basic sanitation in rural areas to better understand the market and whether there is demand for HH latrines / whether HHs would be interested in taking up a loan to construct a latrine. A key issue that emerged is that HHs can broadly be clustered in 3 groups: people who can afford a toilet by themselves, those that want a latrine but cannot make an upfront payment for the construction, and lastly those that would like to have a latrine yet cannot afford one, even if they have access to a loan. Accordingly, the design of the RFS has two components: the revolving fund for household that requires credit facility, secondly the social fund to support those that cannot fund their own toilet construction in any way. This resulted in the current programme, which covers 8 districts in 6 regions for the DSF: two in the Southern part, Northern Region, Upper East, Upper West, and Savannah.

The fund administrators are in charge of selecting FSPs in those districts, which occurs through a competitive tendering process. The tenure for both funds is twelve months, at completion of which the FSP must repay the loan amount in full back to the Fund Administrator.

The fund mechanisms, respectively, are as follows:

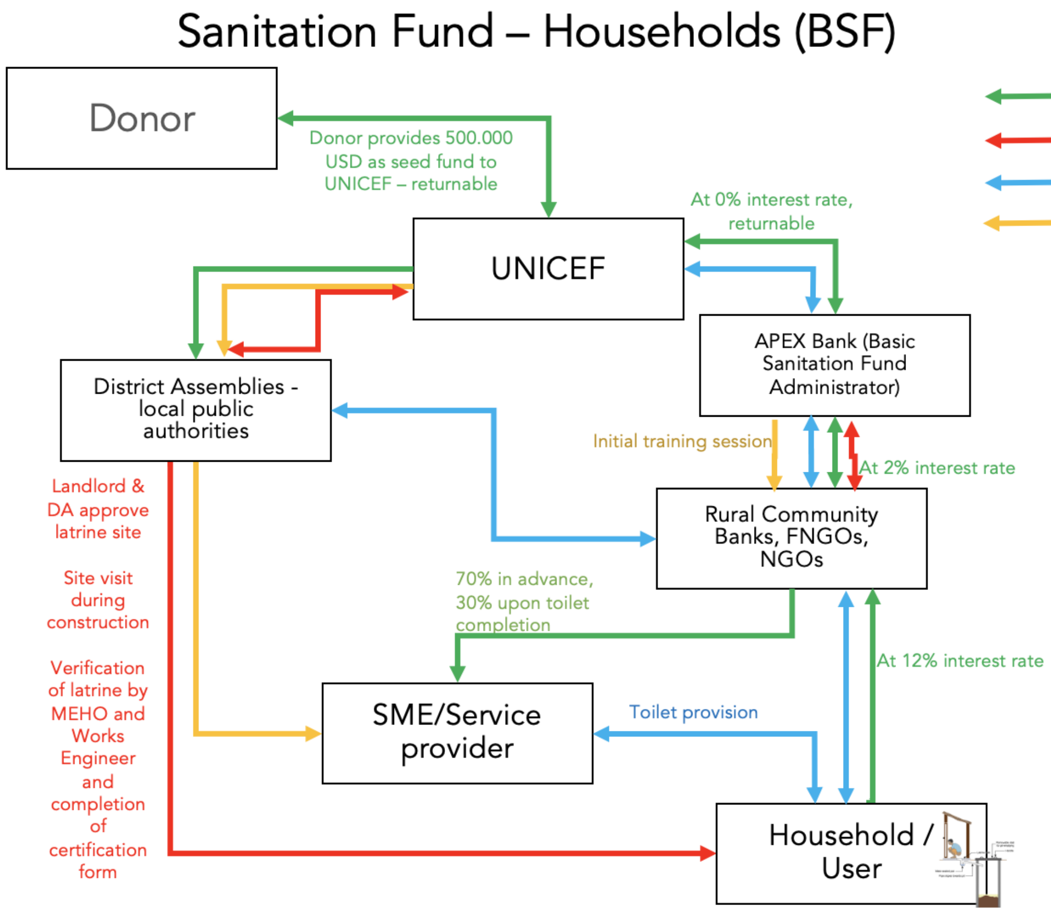
a. **Basic Sanitation Fund (BSF) - Households**

The Fund Administrator, APEX Bank, provides the fund at a 2% interest rate to the FSPs, which are usually rural community banks, MFIs or FNGOs. These then provide the loan to households at a 12% interest rate, of which they retain 10%. The loan size provided to HHs ranges between 2.000 – 5.000 GHS.

In most cases, the Metropolitan Assembly identifies suitable HHs and invites them to fill out an application form, which is then provided to the FSP. After this, the FSP conducts its internal assessment of the suitability and creditworthiness of the applicant and visits the HH together with an Environmental Health Officer from the MA to assess the proposed site, after which the application gets validated. The FSPs use their own software; generally, the HH as well as the artisan will open an account with them, and the money is transferred first to the HH and then to the artisan in two instalments: 70% in advance, and 30% upon verified completion by the MEHO and a Works Engineer. While HHs can choose their own artisan to construct the latrine, it is preferable for them to have received advanced training via UNICEF and/or partners.

The HHs reimburse the loan at an interest rate of 12%, usually on a monthly but in some cases on a more frequent basis. 10% of this rate is retained by the FSP, while 2% goes back to the fund administrator, APEX Bank.

The BSF has not yet revolved, as not all the funds have been disbursed yet.



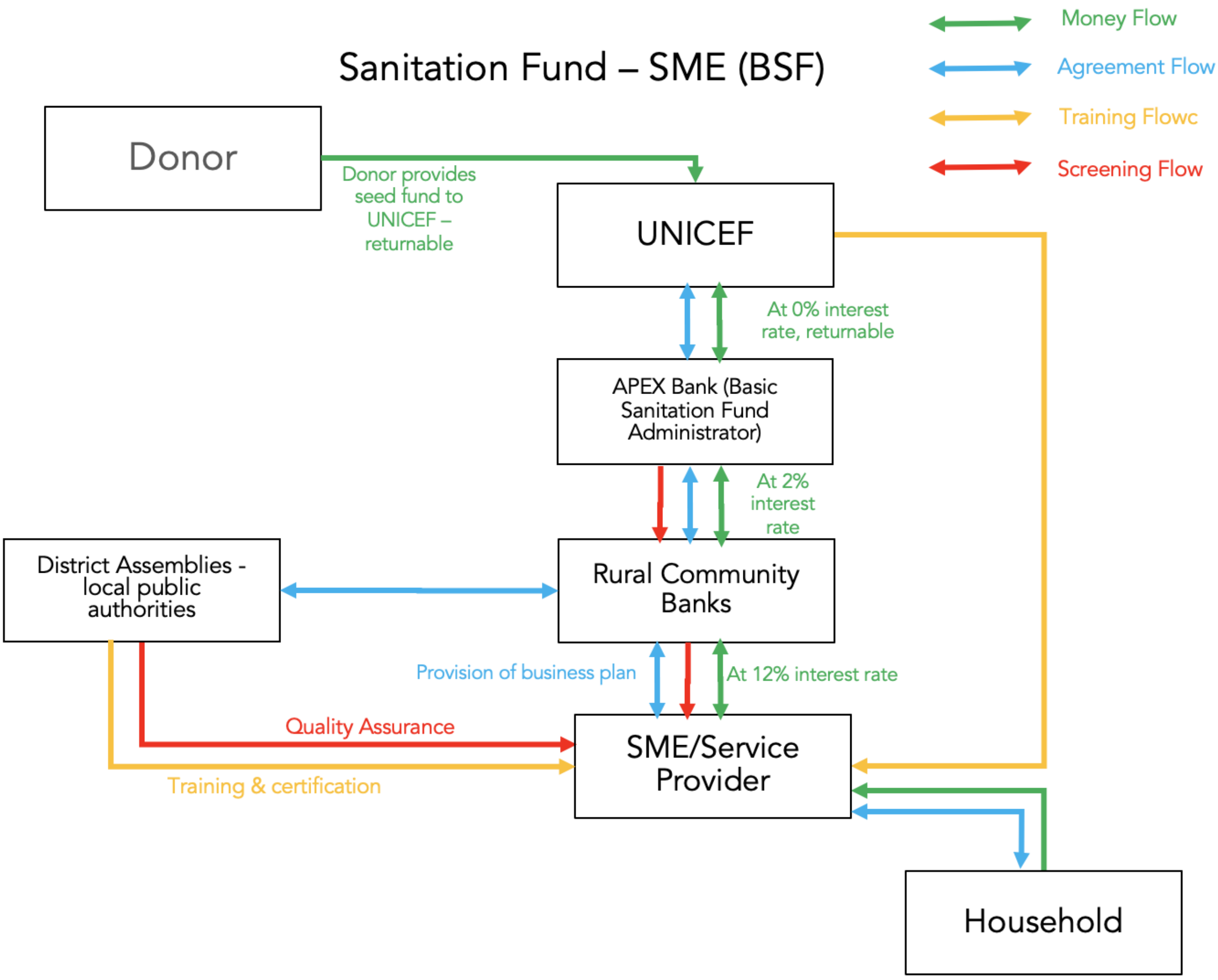
b. Basic Sanitation Fund (BSF) – SMEs

As with the HH loans, APEX Bank, provides the fund at a 2% interest rate to the FSPs. These then provide the loan to SMEs at a 12% interest rate, of which they retain 10%. As per 2021 figures, 76 artisans and 18 construction material suppliers have been engaged in toilet construction[12]. The loan size provided to SMEs is at maximum 25.000 GHS, which they receive upon presentation of a business plan and collateral.

In most cases, the Metropolitan Assembly identifies suitable SMEs, many of which have already benefited from prior training programmes, and invites them to fill out an application form, which is then provided to the FSP. After this, the FSP conducts its internal assessment of the suitability and creditworthiness of the applicant, contingent also on the collateral provided. The FSPs use their own software and methodologies; generally, the artisan will open an account with them.

The SMEs/artisans reimburse the loan at an interest rate of 12% on a monthly basis. 10% of this rate is retained by the FSP, while 2% goes back to the fund administrator, APEX Bank.

[12] March 2022 - Revolving fund write-up_Latest (003)



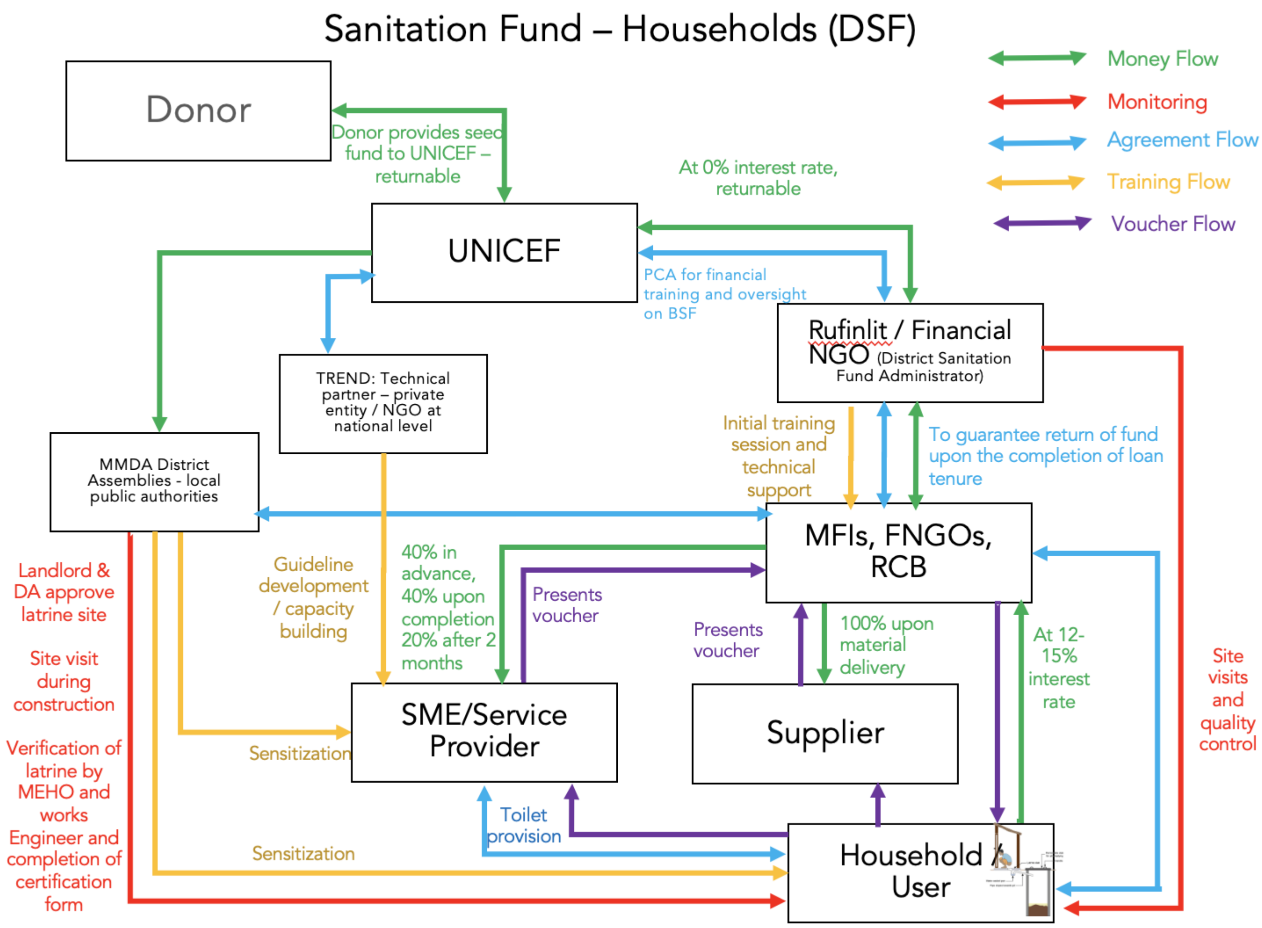
c. District Sanitation Fund (DSF)

The Fund Administrator, Rufinlit, provides the fund interest-free to the FSPs, which are usually FNGOs, MFIs or RCBs. These then provide the loan at a 12-15% interest rate to households. Rufinlit's costs are covered by a Direct Cash Transfer from UNICEF.

In most cases, the District Assembly identifies suitable HHs and invites them to fill out an application form, which is then provided to the FSP. After this, the FSP conducts its internal assessment of the suitability and creditworthiness of the applicant and visits the HH together with an Environmental Health Officer from the DA to assess the proposed site, after which the application gets validated. The FSPs use their own software. Rufinlit implemented a guideline for a cashless system, so the HHs are given coupons that they can then give to the SME and Material Suppliers who can then retrieve cash. The SME and MS get paid separately. The payment happens in three instalments: 40% in advance, 40% upon verified completion by the DEHO and a Works Engineer, and 20% upon assessment of durability of the latrine after two months. While HHs can choose their own artisan to construct the latrine, it is preferable for them to have received advanced training via UNICEF and/or partners.

The HHs reimburse the loan at an interest rate of 12-15%, usually on a monthly but in some cases on a more frequent basis. This rate is retained entirely by the FSP.

At the time of writing, the disbursement rate varies per FSP and per district. Yendi district, for instance, has revolved 2.5 times. Kpandai district has revolved once. The other 6 districts' recovery rate is between 60 to 70%.



The specific roles and responsibilities of the stakeholders involved in each step of the RFS are detailed below:

Donors

UNICEF country offices set aside 7% from funds budgeted for sanitation and are contributing to the RFS. The main donors in the current RFS are the Government of the Netherlands and the Government of Canada, through UNICEF. The donors provide grants that serve as capital for the fund. In later stages as the fund develops in Ghana, this is envisioned to be shifted to government or impact investors. Both donors already were engaged in prior sanitation projects in Ghana, such as the Possible to Profitable (P2P) revolving fund that was supported by the Dutch and had capital of USD 4 million. The Government of the Netherlands has contributed USD 500.000 in funding to the BSF, and the Government of Canada funnelled USD 160.000 into the DSF.

Fund Administrators ARB APEX Bank and Rufinlit

The RFS in Ghana is administrated by ARB APEX Bank (BSF) and Rufinlit (DSF) respectively. APEX Bank is a central bank for RCBs, whereas Rufinlit is the NGO wing of CDC Consult Ltd. When it comes to disbursement of the fund, the first transfer occurs between the fund administrator and the FSP, and the second one between the FSP and the client (HH or SME).

For APEX Bank, while having done fund management previously, it was the first occasion to delve into the sanitation sector as a new commercial area. In the initial stages of the project, APEX Bank focussed on onboarding only RCBs as FSPs, as this falls under their area of expertise and they were already familiar with a lot of the relevant RCBs. However, given the special requirements of the RFS, they have changed their internal policy and are now actively reaching out to FNGOs to leverage their expertise in engaging with the target communities.

Rufinlit has been actively involved in the RFS design in Ghana and the creation of templates and guidelines to foster its implementation and has both a fund management as well as an analytical role in the DSF.

Both fund administrators led on the competitive bidding process to select the districts where the fund would be piloted, as well as the selection of the FSPs, with support from UNICEF. Following the decision, the fund administrators sign the loan agreements with the selected FSPs and are responsible for releasing the funds and for monitoring the functioning of the RFS. Throughout the course of the RFS, APEX Bank and Rufinlit provide technical support to the FSPs they oversee and ensure that the project meets its targets. They further engage in subsequent sensitisation with the respective MMDAs.

APEX Bank has cited a recovery rate of approximately 70% at the time of the field visit in June 2022. For the same period, Rufinlit quoted a recovery rate of 85%. According to UNICEF, the average recovery rate for the RFS is 76%.

In terms of monitoring the progress of the RFS, the fund administrators conduct on-site and off-site monitoring, so FSPs submit monthly reports which the fund administrator reviews and reverts on potential issues. The fund administrators conduct their own field visits to follow up on the programme and verify information received from the FSPs. The obligatory mid-term assessment is very detailed. One comfort for the fund administrators is that MMDAs provide third-party confirmation. The FSPs and MMDAs ask for pictures and documentation of the constructed toilets to make sure that construction is up to par.

Financial service providers:

In total, the program engages 12 FSPs, of which there are 6 in the case of the DSF: 1 RCB (Microfin), 2 MFIs (Baobab & Mwintuur), 2 FNGOs (Card and Global Impact), 1 Microcredit Provider (Vision Fund). As for the BSF, there are also 6 RCBs: Tizaa, Weto, Avenor, Bonzali, Manya Krobo and Akatakyiman. They were selected to be able to cover the specific districts.

BSF:

Region	FSP
Tamale	Tizaa
	Bonzali
Ho	Weto
	Avenor
Ashaiman	Manya Krobo
Cape Coast & KEEA	Akatakyiman

DSF:

Region	FSP
Northern region – Mion	Vision Fund Ghana
Northern Region – Yendi	CARD FNGO
Northern Regon - Kpandai	Baobab Microfinance Company Ltd.
Savannah region – East Gonia	Baobab Microfinance Company Ltd.
Upper West Region – Wa West	Mwintuur Microfinance Company Ltd.
Upper East Region – Garu	Vision Fund Ghana
Central – Adjumako Enyan Essiam	Microfin Rural Bank Ltd.
Oti Region – Kadjebi	Global Impact Foundation

The requirements to onboard FSPs are thorough and include:

1) Assessment on ability to pay
2) Alignment with the program orientation
3) Capacity of staff
4) Knowledge on Microfinance
5) Legal compliance

The FSPs are active players in the RFS. They work together with MMDAs to engage and sensitize potential beneficiaries. This includes both sensitization on sanitation and hygiene, but also on financial matters. They approve the lists of loan beneficiaries provided by MMDAs, sign contracts and follow up on the repayment at an interest rate of 12% in the case of the BSF and 12-15% in the case of the DSF with a tenor of one year. As for the guarantees, this is up to the individual FSP and their processes, but could ether be a guarantor, collateral, or group loans.

FSPs carry administrative costs and the full risk of lack of loan repayment. In case of default from the borrower, they contact the guarantor or MMDA. Some conduct monitoring calls and visits to verify the beneficiaries, usually together with MMDA representatives.

MMDAs

As the Ghanaian government has been pursuing a decentralisation strategy for its water and sanitation sectors, MMDAs oversee the coordination of WASH interventions by the state government, NGOs, and donors on the ground.

UNICEF leads on establishing and maintaining formal relationships with the MMDAs. Most of these go years back and throughout different programmes. For the RFS, they were selected in a competitive process after having been made aware of the opportunity that included an application, interviews, and visits with multiple stakeholders.

MMDAs are involved at several stages in supporting the implementation of the RFS: They know their communities best, so through WASH Committees, they work on triggering on the importance of sanitation and hygiene through sensitization activities, door-to-door approaches, engagement of religious leaders, working with school children, information services vans which drive around neighbourhoods and do announcements, data collection and understanding the various community groups and engaging directly with them. Attendance for triggering events is generally good, especially in rural areas.

Further, they propose potential borrowers to the FSPs and follow up on the verification of construction, ensuring that loans are disbursed in a transparent and unbiased manner and that they are duly repaid.

At least quarterly, usually monthly, meetings are conducted with all WASH Committee members to cover recent developments or challenges, the number of borrowers who have applied, how much money has been used for latrine construction, what was the recovery rate, what gaps are there and how can we fix them, potentially invite people who struggle with payment and inform them on the requirements of a revolving fund and how important their repayment is. Reporting is done quarterly through the region, not to UNICEF directly.

SMEs

The SME component of the BSF directly targets toilet and sanitation SMEs and service providers as potential borrowers.

SMEs are key actors in the RRFS, since they:

- Inform HH about the options available and assess their needs
- Support with outreach
- Sign an agreement with the FSP
- Provide a Guarantor or collateral as guarantee
- Procure material, supply material, build toilets and sanitation systems
- Handover the constructed toilet to the HH and verification by the on-site team

The options and the materials provided must be locally available and with the optimum costing to ensure viability for SMEs and feasibility for households. The average cost is as follows as per figures provided by the UNICEF Ghana team:

Self-constructed (or with community support)	Self-constructed with artisan support	Artisan constructed with material provided by HH	Artisan constructed	Mason constructed Biofil (urban areas)
No lining, cement slab, thatch roof	No lining, cement slab, thatch roof	Lining (cement, sand, gravel), roofing sheets and timber	Lining (cement, sand, gravel), roofing sheets and timber	Biodigester; Septic tank
Estimated GHS 100-200	GHS 200-300	GHS 700	GHS 1,000	GHS 1344 (substructure only) - GHS 5,000 depending on size)

Households

Households are one of the two main beneficiaries of the RFS scheme. While they do not receive the money from the loan physically, they express the loan amount that they are interested in and receive the toilet according to their needs and financial abilities, which they pay back in instalments to the FSP (or directly to the SME in the case of the SME loan). Some FSPs work on a monthly repayment schedule, while others consider that it is easier for their client base to repay in smaller daily instalments rather than larger monthly ones.

HHs are selected based on their needs, their income and ability to repay. While many HH already had basic toilets, these were often not safe from a health and environmental perspective. The programme prioritises the delivery of safe and advanced sanitation solutions, thus it was key to exchange with the households on their motivation, their satisfaction with their toilet, and the construction process.

c. The RRFS in numbers

The following table provides an overview with data provided by the UNICEF Ghana team as of August 2022.

DETAIL	BSF	DSF
Loan amount available from donors	USD 500.000 (Government of the Netherlands)	USD 160.000 (Government of Canada)
Total disbursement	GHS 2,312,342.35	GHS 973,647.00
Average cost of latrine	GHS 3,500.00	GHS 3,200.00
Interest rate	12%	12-15%
Tenure	12 months	12 months
Repayment	GHS 1,786,731.12	GHS 689,259.00
Rate of repayment	77%	71%
Beneficiaries of household loans	719	847
Share of men and women borrowers	N/A	N/A
No. of toilets completed	573	704
No. of people gaining access to toilets	3,438	4,928
Ongoing toilet construction	146	143
Beneficiaries of Sanitation business loans	14	0
Overall UNICEF cost for operating the RFS	N/A	N/A

Note: Repayment and rate of repayments change with time due to continuous disbursement of funds and recovery of the loans disbursed.

The information from previous chapters and data in the above table shows several facts worth noting, that will be address in the following chapters:

- Precise data on several aspects is not being monitored regularly and data is not readily available to all parties involved (no gender disaggregation, lack of clarity about costs or managing the fund).
- The loan repayment rate, as well as related costs to manage the fund vary across the selected FSPs and is sometimes not clearly defined.
-

4. Analysis

The key success factors and areas for improvement of the RRFS in Ghana are assessed through a SWOT analysis in the following chapters.

a. Relevance

The RFS responds to beneficiaries' needs in the following ways:

Strengths

- **Targeted audience:** The RFS addresses the need for the construction of durable and affordable improved latrine options adapted to the income situations of the borrowers for Households that cannot afford the full cost up front.
- **Increasing demand**: SMEs remarked the growing demand, which is often greater than what they can deliver on. This has even led to the formation of an Association of SMEs in the case of Tamale – around 18 SMEs who previously were trained under UNICEF capacity building programmes have grouped together and support one another in multiple ways. Notably, there appears to be little perception of competition as they cover specific geographic areas, work on referrals, and generally have more requests than means to fulfil them.
- **CLTS**: The Community Led Total Sanitation (CLTS) approach, initiated in 2007 and implemented from 2010 onwards, has played a significant role in the country's sanitation subsector. Over half of the 5000 communities where CLTS triggering has been conducted have been declared Open Defecation Free (ODF)[13]. However, many of the latrines constructed are basic and do not meet the improved sanitation criteria, and a relapse to Open Defecation (OD) was beginning to have a negative impact on the effectiveness of the CLTS approach. Based on this lesson learnt, the RFS focuses on improved sanitation.
- **Revolving mechanism**: The WASH sector's budget remains insufficient – while the 2021 allocation of GHS 558 million represents an increase of 74% from 2020, a funding gap of nearly twice that amount remains with approx. GHS 1,750 million required to provide basic services[14]. The RFS allows to recover costs of toilets and revolve the fund several times, allowing resources for further sanitation solutions, rather than relying on donor or state funding.
- **Employment creation**: The RFS facilitates sanitation focused on income generation activities and has created initial employment opportunities. SMEs are very satisfied with the RFS, mentioning that it increased their client base through the increased demand and additional promotion they are conducting.

[13] Delaire C, Kisiangani J, Stuart K, Antwi-Agyei P, Khush R, Peletz R (2022) Can open-defecation free (ODF) communities be sustained? A cross-sectional study in rural Ghana. PLoS ONE 17(1): e0261674. https://doi.org/10.1371/journal.pone.0261674
[14] 2021 WASH Unit Brief, UNICEF. https://www.unicef.org/ghana/media/4341/file/Budget%20Brief%20-%20Water,%20Sanitation%20&%20Hygiene.pdf

- **Options**: Under the RFS, HHs are supposed to be presented with a range of sanitation options that fit their personal preference, the local context and environment, to satisfy the users' expectations and thus prevent a return to open defecation.
- **Social Fund:** The Social Fund is a mechanism that allows the RFS to also reach the poorest of the poor. This component of UNICEF's work is a mechanism that allows to reach those who would not qualify for the BSF or DSF, even at the preferential interest rates.

Weaknesses / Limitations

- **Lack of innovation and training**: The focus appears to have been on the construction of traditional latrines, especially in more rural areas where advanced technologies were harder to procure and service providers haven't received the corresponding training, which might not be as durable as more innovative models and technologies, which could trigger a return to OD.
- **Limited to one stage of the sanitation value chain**: Pit emptying and upgrading are not financed, which could jeopardise the intended effect on improving sanitation as long as other components of the value chain remain unchecked.
- **Gender focus**: The programme has so far not put particular attention on reaching female borrowers.

Opportunities

- **Technology**: Building upon the capacities of SMEs to provide more durable models such as biodigesters could provide lasting impact. Government subsidies and favourable regulations could help fostering those technologies in Ghana.
- **Longevity of improved sanitation:** The potential for preventing a return to OD on the long term could be increased through financing along the entire sanitation value chain (include training on business models for pit emptying, etc.) and life cycle of sanitation facilities (e.g., including pit emptying and upgrading).
- **Regulation**: A driving factor of the RFS' success is the Local Government Act (Act 462) covering criminalisation of houses without toilets which ascertain that landlords are responsible to ensure that every house should have a toilet in the house. In Tamale, for example, a moratorium was issued that if a toilet is not built within a certain timeframe, the landlord will be prosecuted. This bylaw increased demand by HHs and they started prioritising spending money on toilets. Enforcement of this bylaw is still lacking and should be expanded.
- **Building on new attention to WASH:** The COVID-19 pandemic has reinvigorated Ghana's WASH sector, as the rate of construction of hygiene facilities accelerated, especially handwashing stations, and awareness campaigns about the importance of hygiene were elaborated and driven forward. This momentum should be built upon by funnelling additional funding into facilities such as the RFS and combining increased sensitisation with the monetary impact.

Threats

- **Population growth:** Due to the population growth rate of around 2.1% in Ghana[15], the efficiency and pace of disbursement must be increased to make sure that it revolves fast enough to meet growing demand and need.
- **Lack in understanding of benefits of sanitation loans:** Taking out a loan for the purpose of improving one's personal home is still a new idea to many of the HHs, especially those of the poorer segments of society which are targeted by the RFS, as their investment does not generate any form of income. Homeowners were reluctant to borrow for an investment that does not generate income. On the other hand, on the side of the FSPs concerns also existed, as they are accustomed to making funds available for business purposes. This can be countered by increased awareness to how improved sanitation contributes to increased productivity and the ability to pursue education and training, alongside reduced health-related issues and expenses. In an ideal case, it allows a FSP to unlock a new beneficiary base and repayment would increases the confidence of people who may otherwise never have considered taking a loan.
- **Culture and religion:** In some segments of Ghanaian society, OD is still considered a cleaner and safer option as opposed to having a latrine. This is often grounded in religious and cultural beliefs. Community leaders should be actively involved in the awareness raising to counter that misconception.

Summary of key findings

- The RFS fills an existing gap in access to improved sanitation by making it accessible to people that otherwise would not have been able to afford their own latrines.
- This role could become even more relevant, if the financing would be extended beyond the focus on financing the construction of latrines.
- Cultural, religious, and societal norms need to be addressed productively in order to foster awareness and acceptance of improved sanitation.
- More clearly disaggregate according to gender in the monitoring of programme implementation and targeting women as borrowers more actively, particularly in areas where repayment rates are low.

b. Effectiveness

The RFS builds on years of work on the eco-system through the Community-Led Total Sanitation (CLTS), the Sanitation and Marketing (SanMark), the Urban Sanitation Programme (USP) and other programs. While it is difficult to draw a clear baseline, previous reports and articles mention that as of 2021, training has been provided to 1,000 artisans and 4,000 Community Technical Volunteers (CTVs) across 8 districts, 20.000 toilets have been constructed since 2017, and over 500 sales agents have received training enabling them to promote sanitation awareness in local communities. SanMark further led on the creation of VSLAs in beneficiary communities and, together with partners, provided training on matters related to enterprise creation and business planning for SMEs and artisans. These results have encouraged UNICEF, the Government of Ghana, and partners to scale up this intervention, and generated interest by commercial financing entities to expand their work in the sanitation sector.

Strengths

[15] https://data.worldbank.org/indicator/SP.POP.GROW?locations=GH

- **Community-based:** In some regions, such as Yendi which is covered by CARD FNGO, the fund was implemented smoothly, disbursed within 3 months and recovery rate was close to 100%, thanks to good relations with the local community and good knowledge of the ecosystem. It must be noted that this work was also very resource-intensive and required one staff to be constantly on the road visiting and directly following up with borrowers. The node between the FSPs, UNICEF, the fund administrators and communities is crucial, which is mirrored by UNICEF assigning a Municipal Resource Person to each MMA in USP target municipalities to support with coordination, monitoring, and capacity building. As UNICEF works with a results-based financing approach with the MMDAs, additional incentives are created for them to budget for sanitation interventions and attain ODF status.
- **Improvements:** Most FSPs were satisfied with the improvements generated through the loan: MFIs and RCBs consider it a way to enter a new market and gain a new client base. The SMEs note a considerable increase of business, and Households were very satisfied with their improved toilets. The loans were repaid at an average rate of around 75% - while not yet optimal, this demonstrating the potential of the approach.
- **Coordination**: The fund administrators participate in regular meetings with all relevant stakeholders, select the FSP, signing agreements, and disburse the funds to them. These meetings take place on a platform developed by UNICEF. UNICEF organises quarterly review sessions at each of the assemblies that the FSPs and fund administrators attend to present their experiences and share ideas. This also allows the ironing out of misunderstandings or misconceptions: APEX Bank cited that initially, a disconnect existed between the MMDAs' and the banks' view of who should be eligible for a loan, and it had to be made clear that the RFS does not represent free money. On the other hand, RCBs must also understand the economic and social needs of their beneficiaries. This creates a platform for mutual learning and sharing of best practices. The coordination between the FSPs and the MMDAs, on the other hand, allows for an adequate financial literacy, demand creation, selection of reliable SMEs to collaborate with the FSPs, as well as a transparent provision of services to Households and assurance that chosen HHs can pay.
- **Knowledge and awareness creation** is key and most FSPs and MMDAs take it seriously, as they understand that it is a precondition for the RFS to function. For example, CARD has a lot of success in Yendi because of their strategy on sensitisation and promotion, including fairs and radio engagements for toilet SMEs. Partnerships and collaboration between the assemblies and FSPs is critical. The pilot regions with the greatest success generally cited strong collaboration as the bedrock for their efforts. Field officers of the MMDA and the FSP visit the HHs together, so this generates an awareness with the loan taker that non-repayment could create issues not just with the FSP, but also the assembly (i.e., the community).
- **Training** is provided to FSPs and SMEs, who receive both sanitation business and technical training.

Weaknesses

- **Challenges to Revolving Mechanism**: APEX Bank highlighted that one of the drawbacks to the program was that they were hoping for repeat borrowing from the banks. Having estimated and recovered 70% of the loan, the banks failed to cover themselves for those 30%. Those were intended to come from the collateral that was raised against the borrowers, but in practice, the collateral (land property) cannot always be provided, for example in the case of Ashaiman where, accordingly, only 6 loans were issued. Also, FSPs are generally reluctant to judicially pursue cases of non-repayment as it may negatively affect their standing in the communities and the sums are often negligible compared to the cost of a court case. It should be noted that in other areas, a guaranteed system worked out well, for example by nominating a relative who can stand-in in case the borrower cannot cover the repayment. However, overall, placing the risk of recovery fully on the FSPs may impede scaling.

- **Complicated logistics:** Logistics can be challenging too, especially when it is necessary to move from house to house. Due to the loan criteria, in some cases the bank has to visit the client's desired site for the latrine to conduct a visual assessment. A mobile software that could have the tools to appraise in place for the field worker could cut down on some of the effort that goes into this.
- **Dependency on Geography and Seasonality:** Geographical differences in terms of repayment and seasonality appear to be an issue across the board. In the Northern Region, there is only one rainy season, but in the southern parts of the country, there are two. This can sometimes delay latrine construction. Income levels also change according to the season and harvest, and the cost of construction varies widely. For example, in some places further north, distances to transport sea sand are very long. Also, revenues of the borrowers can depend on the season, especially if they work in the agricultural field, thus making repayment more complicated.
- **Fund amount**: FSPs and MMDAs highlighted in conversations that the fund is not sufficient to respond to the high demand for improved sanitation loans, and that the loan size is too small to adequately cover the cost of toilets, especially vis-à-vis inflation. The existing loan portfolio is not sufficient for expanding interventions to poor households requiring loans.
- **Monitoring**: At this moment there is no coherent and detailed enough monitoring and evaluation mechanism in place that covers all stakeholders involved and is consistent across the MMDAs, region and countries to track progress in both project implementation and progress against WASH targets.

Opportunities

- **Strong financial sector structure:** The government of Ghana has regulations set in place that all banks must comply with to improve transparency and accountability. This includes a weekly audit by the government through the Association of Rural Banks in the Central Bank of Ghana. The BOG does an annual site visit to examine activities and conduct assessments. Beyond the regulatory aspects, the Ghana Microfinance Institutions Network (GHAMFIN) provides a platform for RCBs, MFIs, FNGOs and other key financial stakeholders to exchange on best practices, while also engaging in advocacy on their behalf.
- **Increased work with FNGOs:** APEX Bank reported that, while they primarily work with RCBs, they are now increasingly shifting their policies to also accommodate FNGOs, particularly for funds like the RFS that deal with BOP customers.
- **Shift or include landlords as targeted beneficiaries:** To increase the potential to receive reliable collateral, landlords, particularly in urban settings, are a proven and relevant target group for market-based sanitation interventions. This could potentially be leveraged to increase the efficiency of the fund, as they could provide reliable collateral.
- **Leveraging Seasonality:** The RFS could take advantage of available time during off season for the construction of toilets and providing a loan that can be repaid, when income is higher during harvest season.

Threats

- **Lack of coherent policies and strategies:** Despite some national and state policies and strategies being in place, in general good coordination seems to be lacking both horizontally (inter-ministerial) or

johanna.vontoggenburg@cewas.org | www.cewas.org

vertically (between government tiers). In addition, although private vendors play a key role in the sector, they often remain outside of the formal policy processes. Multiple laws and by-laws pertaining to sanitation are not sufficiently enforced, impacting the demand and compliance with standards.

- **Perception of socially oriented programmes and donor fundings**: One major challenge cited by stakeholders on the ground is the perception that, if UNICEF is involved, facilities should be provided for free. Challenges in that regard occurred in the early rollout phases of the RFS, when expectancy based on prior experiences with donor-funded programmes made it difficult to convince beneficiaries to pay for toilet facilities, even if it is through a preferential loan.

Summary of key findings

- Testing the RFS with the same set-up in other regions that might have slightly different conditions will help understand the success factors and gaps better, in order to strengthen the mechanism before scaling.
- It is beneficial to combine efforts with other sanitation programmes to make sure that the incentives given to beneficiary populations are consistent and all converging towards ending OD.
- It is key to be able to rely on Government financial involvement in the RRFS in the future, especially when scaling the mechanism to new districts, municipalities, or regions.
- The RFS's partners must be firmly rooted within the target communities to make sure that sufficient follow-up efforts are made, and repayment rates reach their full potential.
- The purpose of the loan must be clearly defined and it is beneficial to frame it as a commercial, bank-led loan, not a donor-funded programme, to avoid misconceptions.

c. Cost-effectiveness / Efficiency

The exact operating costs of the RFS are not easy to ascertain as data is lacking or insufficient in places, both on the part of UNICEF as well as the partners. There are challenges in isolating amounts spent on the complementary activities of demand creation and sanitation marketing, solely for the RFS, since these activities are part of a larger project context. The table below, provided by the UNICEF team, gives an overview of the approximate financials for the functioning of the RFS:

	Number of toilets constructed	Typical toilet cost (GHS)	Public costs (USD	Cost per toilet in USD (from public funds)	Subsidy policy	Amounts leveraged from HH (GHS)	Amounts leveraged from HH (US$)	Leveraging ratio	Number of toilets constructed per year
BSF	382	3,360	198,000	518	0%	1,283,520.00	168,385	0.85	127
DSF	830	2,678	217,887	263	0%	2,222,740	291,601	1.34	277

Note: The Number of toilets constructed includes both ongoing and completed construction in this table.

Strengths

- **Flexibility in management:** Fund administrators (and UNICEF) support the FSPs in setting up processes to allow for disbursement and collection of funds, while leaving a certain degree of flexibility. Understanding that latrine construction is a non-commercial venture, the fund administrators are aware that it is not a very popular kind of product, and thus worked to develop the FSPs' capacity in that respect by standardising the processes. However, within that framework, they allow the FSPs to use their internal mechanisms in terms of disbursement. Rufinlit raised that if certain restrictions were imposed on them and recovery does not work out for any reason, they will hold the fund administrators accountable or think that responsibility is shared. This allows for more ownership and more localised approaches.
- **Group borrowers:** Some FSPs are allowing borrowers to form groups of 10-20 individuals. One leader is nominated who is in charge of following up with the other borrowers on the repayment. This creates a degree of peer pressure among the HHs. Similarly, Village Savings and Loan Associations have also proven effective, especially in rural areas and among women, to allow the pooling of funds.
- **Exposure**: FSPs have benefitted from increased exposure to more clients. While many of them are still learning about the needs of the targeted beneficiaries, they are adapting their models to better correspond with them and regard this as an opportunity to expand their client base.
- **Ecosystem**: One of the success factors of the RFS lies in the fact that it builds upon many predeceasing (and ongoing) projects and interventions in the sanitation sector. This means that the set-up costs of the fund were positively impacted, for example by being able to cut costs in terms of triggering and sensitisation.
- **Repayment in GHS**: Currently, the donors allow for repayment in Ghanaian currency, which, to a certain degree, shields the RFS from staggering inflation rates.

Weaknesses

- **Operating costs**: Across the board, FSPs (and fund administrators) who were consulted during the field visit state that the interest rate they retain does not allow them to cover their costs. On the other hand, their estimation of how much the RFS costs them varies greatly depending on their internal set-up. In most cases, it appears that the FSPs have not conducted an exact breakdown of the costs and are instead only able to provide estimates. Rufinlit's case, for example, is as follows: approximately 6 dedicated staff work on the fund administration side of the RFS, including a programme component lead, a managing consultant who does quality control, consultants that cover capacity building and go to the field and some who are involved in off-site support. Rufinlit contributes to the project for everything that goes beyond what is covered by the DCT, as the rates that UNICEF pays them allows for approximately 40% of cost recovery and thus are far removed from their usual rates.
- **Low cost-benefit**: In case of recovery challenges, it is difficult for FSPs to justify the costs of thorough follow-up due to the small ticket sizes, which oven are lower than the required manpower and travel expenses. Thus, some struggle to achieve the desired repayment rates.
- **MMDA budgets**: While the cost of conducting training, outreach and monitoring and evaluation by the MMDAs is not clear, previous reports hint at the fact that resources for behavior change including communication and hygiene promotion could be improved, especially given the fact that voluntary MMDA members are carrying out a large part of the groundwork. While UNICEF provides a stipend

to the MMDAs, this appears insufficient to make sure the MMDAs are adequately equipped to conduct and expand their sensitisation work.

- **Decentralisation and faster response times:** According to some MMDAs, the monitoring system where they are supposed to upload info about each constructed toilet and the overall data system is slow. If there are any improvements to be made, this needs to be brought to the national level, implying that there appears to be a need for more decentralized capacity.

Opportunities

- **Flexible repayment:** The District Assembly in Yendi outlined that there is the possibility for loan takers, who often work in the agricultural field, to repay their loans in an equivalent collateral in agricultural products, which could solve cash flow issues on a seasonal basis. As many FSPs, especially MFIs, operate in the agricultural field, this could be a mutually beneficial arrangement.
- **Leveraging technology:** New technologies, including mobile-based ones, are constantly being rolled out that could improve the efficiency of monitoring and evaluation, and would allow quicker intervention in the case of challenges. Many FSPs and MMDAs still work paper-based, and information is often extremely centralized with individuals. Introducing better software and standardising as far as possible could streamline this and, while requiring up-front investment, would help cutting costs in the mid- to long-term.
- **Monitoring:** To expand and scale the RFS, it is key to establish a sound monitoring and evaluation system to establish cost drivers and increase efficiency of the RFS system
- **Partnerships:** Increasing global interest to provide WASH micro credits could lead to more efficient actors entering the market in the future (e.g., Water.org's USD 1 billion water equity fund which was announced in September 2022 at the Clinton Global Initiative Conference)[16]. This could result in new potential partners for the RFS.

Threats

- **Inflation**: The cost of toilets is high due to the constant increase in the cost of toilet materials and inflation, making it difficult to accurately estimate the cost of toilets and whether the loan will be sufficient for the full cost of the toilet. In a few cases of beneficiaries interviewed, they highlighted the need to cover part of the costs from their own pocket.
- **MFIs**: The Ghanaian government recently cracked down on the MFI sector in Ghana to inhibit untransparent business practices and lack of licensing, causing a lot of them to stop operations or shut down completely.
- **Contrasting programs:** Government policy and certain NGO programmes can prove counterproductive. Some MMDAs construct a number of free toilets for their constituents, but then expect others to take a loan. By doing so they are invalidating their own policy, and who is deserving of a free toilet and who must take a loan or is expected to pay out of pocket is not always clearly distinguished.
- **Low public investment**: Overall, the sanitation sector in Ghana has witnessed relatively low investment in WASH from state governments, and poor cost recovery. Challenges in disbursing funds from the Government to the Regions and to District/Municipality levels have been observed and have also

[16] https://apnews.com/article/wastewater-matt-damon-climate-and-environment-f76e66810997c1cd39496262463bc3db

affected the RFS. However, increased government spending is needed to de-risk the sector for private investors.

Summary of key findings

- Cost recovery needs to be near to 100% for the Fund to be able to revolve. Since the responsibility for recovery is with the FSPs, this will automatically occur once the funds have been disbursed in their entirety (not the case in the BSF yet), and while FSPs may be willing to cover part of the missing amounts as part of their CSR strategies, this might become more challenging when the RFS scales and amounts – and gaps – grow accordingly.
- The set-up costs for the RFS were beneficial due to the already existing ecosystem, which covered many areas required for the successful implementation and scaling. Demand-led approaches like the RFS have proven cost effective. When expanding the RFS to other regions (or countries), this should be carefully assessed to avoid incurring unnecessary expenses.
- Most FSPs had no specific training on sanitation, and they have not been guided on how to track the resources (time, staff, transportation expenses etc…) they use within the framework of the programme. This capacity building is key, as some FSPs assume that the programme is not profitable for them but cannot provide actual numbers. In order to scale, new FSPs to be onboarded must be convinced that the programme is either financially neutral or profitable, so UNICEF must rely on clear and accurate numbers from current FSPs.
- Increased Government involvement in the sanitation sector is crucial.

d. Sustainability

Ending open defecation is a large endeavour, and the past programs as well as the RFS have made an important contribution to solving OD.

Strengths

- **Partner support**: Promising SMEs were educated by UNICEF on financial literacy and on technical aspects. Before the RFS, UNUICEF engaged them and after they had taken the loan UNICEF continued working with them and helped in the process of construction. Even until now, the Assemblies still engages them and offers other assistance. Providing such assistance to the SMES will minimise the risk of their businesses falling, and will allow the introduction of new, innovative sanitation technologies to create lasting facilities. Likewise, continuing to educate FSPs on the sanitation sector and on the needs of the beneficiaries of the RFS can support the adaptation of financial packages and the establishment of the BoP as an interesting client base.
- **Behaviour change**: Awareness is rising ad behaviour change is occurring through the fact that more people are adopting improved toilets by using loans, that the repayment rate is high and that these best practice cases encourage all stakeholders and mainly MFIs, TBOs and Households to maintain increased demand for improved toilets and loans. During the field visits, many borrowers and their communities asserted that when a latrine is built in a HH, the neighbouring HHs will become more interested in acquiring one themselves, creating a snowball effect.
- **Revolving mechanism:** A Revolving Fund is inherently sustainable, as the investments should be recovered over a set duration and enable more borrowers to benefit from it.

Weaknesses

- **Durability of latrines:** Sanitation facilities must be durable enough to withstand extreme weather, such as flooding and heavy rains, and adapted to local needs and conditions. Otherwise, deterioration of the facility could trigger a return to OD.
- **Sanitation Value Chain:** Ending OD is only one aspect in the sanitation value chain and does not contribute to solving the sanitation crisis in a fully circular and sustainable way. For instance, in an interview with a future potential fund administrator, Fidelity Bank, the sanitation value chain was thoroughly discussed. This corresponds with on-the-ground observations which indicate that in some cases, the lack of water impedes the ability to handwash, or unreliable desludging services causing operational issues for the latrines. The waste disposal sector is also still lacking and needs to be rehauled to make sure that the content of the pits is disposed of in a safe manner. With the proliferation of latrines, the problem of sludge evacuation, transportation and treatment/reuse will soon emerge & could result in a crisis if no sludge evacuation service providers are available.
- **Low interest rates:** The RFS with its low interest rates (sub-market) can deter other investors (impact and commercial investors) from entering the market and creates a dependency on government and UNICEF funding. As the commercial return is low in the sanitation sector, it is difficult for banks to commit their funds to it. The interest rates of the RFS are much below standard. To make the RFS sustainable, a good orientation of the forefront implementers, especially RCBs, is needed.

Opportunities

- Designing micro credits for other sanitation services like pit emptying or upgrading could allow to increase progress towards SDG target 6.2, while at the same time opening an opportunity for FSPs to provide ‘repeat sales’ to customers who reliably repaid their loans.
- Complementary sustainable practices exist to overcome the problem of pit evacuation, for example a biogas system which provides the Household with cooking gas. Demand for these types of latrines is growing rapidly. SMEs, with adequate training from UNICEF or other actors are expected to be interested in such opportunities to expand their businesses, since it represents another income opportunity. Dual pits & improved pits are being prioritized/recommended for households, as the cost of evacuation is almost equivalent to the cost of construction of a new pit.
- Allowing groups of SMEs, for example the Association of Artisans in Tamale, to vouch for each other and act as guarantors could enable more SMEs to access the loan, as some of them currently cannot meet the collateral requirements.
- Ghanaian economy has been growing fast before the COVID-19 pandemic[17]. While a global recession might stifle growth, the country still stands out among its African neighbours. It presents an attractive opportunity and framework for investments on the African continent.

Threats

- **Inflation:** Due to inflation, the price of materials is increasing daily. Loans are sometimes not enough to cover the cost of the latrine, or in the case of the SMEs the materials they aimed to acquire to be able to expand their businesses. Once SMEs have made an agreement with a HH, they cannot modify the price anymore, meaning that they sometimes lose out on income.
- **MMDA Commitment:** MMDAs must be convinced to take ownership of financing activities related to the RFS, such as triggering and following up on latrine construction, otherwise the dependency on UNICEF will continue and institutionalise. However, this goes beyond a matter of attitude and might also

[17] Doing business and investing in Ghana, PWC, 2018. Accessed via: https://www.pwc.com/gh/en/pdf/doing-business-and-investing-gh.pdf

need to be facilitated through the corresponding laws, especially if MMDAs are supposed to put money into the fund itself.

- **Human resources:** Both on the governmental side as well as in the development sector, the sanitation sector is understaffed from a technical perspective, as opposed to administrative staff. This makes it challenging to implement the measures needed for the RFS and healthy sanitation financing to reach its full potential.

Summary of key findings

- Investing in human resources of on-the-ground staff and building capacities of the FSPs is key, as well as sensitizing them to sanitation sector and business opportunities. Sustainability of the RFS implies also implies that MFIs get attracted by the sanitation sector beyond the RFS framework.
- There is a need to get the Government involved in the transition from international donor funded programme to nationally sustained and impact investor funded programme. The Government's involvement would also contribute to de-risking the fund in the eyes of impact investors.
- Coordination is needed to ensure that the RFS is interlinked with other programmes that cover different components of the sanitation value chain.

e. Equity – ability to reach poor households and gender

Strengths

- **Opportunity**: Overall, the RRFS, by providing loans at preferential rates to be paid back over time offers many HHs the opportunity to get an improved toilet, which would have otherwise been out of reach for them. The RFS is also a first entry point for many of the FSPs to work with this demography, and positive experiences could incentivise them to create and open up more financial offers to low-earning HHs.
- **Flexibility of FSPs**: Many FSPs are aware of their borrowers' financial situation and find ways to accommodate them, for example by allowing smaller daily payments (sometimes via mobile transfer), rather than larger monthly ones.

Weaknesses

- **Gender**: The number of female beneficiaries remains low, and it proves challenging to target female borrowers for sanitation due to the cultural and societal values in many regions of Ghana. Most of the monitoring tools and data are not gender-disaggregated and thus do not allow a full overview of the situation.
- **Inclusiveness**: Improved toilets options which are friendly for people with disabilities are often financially out of reach, especially for the less privileged among them. As it stands, there is insufficient information regarding the provision of access for people with disabilities to improved toilets, as set out in the objectives.
- **Data and monitoring:** Disaggregated data to make a real assessment of the RFS' equity is scattered and lacking, as requirements to collect it are not enforced. While certain figures can be calculated (for example, an average household size is 5, of which 2.4 are children, meaning that if 8.366 people have received a new latrine via the fund, then 4.015,68 of those are likely children[18]), those figures are difficult to confirm.

[18] March 2022 - Revolving Fund write up latest / data from December 2021, UNICEF

Opportunities

- **Expansion of VSLAs**: VSLAs with a sanitation financing component are already up and running in 9 regions in Ghana and provide an inclusive mechanism to enable more HHs, especially women-led ones, to qualify for loans. Through the VSLAs, members can pool funds which will then be lent out to enable the members to pay for sanitation solutions.
- **Seasonality of revenues:** The current monthly repayment scheme is not always adapted to farmers and other populations with seasonal revenues. FSPs could discuss with MMDAs how to adapt the repayment scheme for populations with seasonal revenues, in a way to ease the reimbursement process for HHs and to make their internal reimbursement forecasts more realistic.
- **Women empowerment:** Women are still highly underserved in terms of financial offers, and thus make for a high-potential market – and social empowerment – opportunity. Further, their economic disadvantage costs African economies around USD 60 billion annually[19]. As more and more programmes are set up to incentivise women to get into business and build on their skills and capacity to foster their involvement in the WASH sector, the RFS, moving forward, should build on this trend and actively push for targeted strategies to reach women borrowers.

Threats

- **Shift in attention**: During the COVID-19 pandemic, a renewed attention was placed on matters related to hygiene and sanitation, for example through handwashing stations and awareness campaigns. In a post-pandemic world, this attention and the corresponding budgets might be shifted out of the WASH sector again.
- **Repayment rates:** If in the future, as impact investors contribute to the RFS, their expectations will add pressure on the required repayment rate levels and on the administrative and implementation costs, while targeting those vulnerable populations usually requires slightly more resource engagement.

Key findings

- To better understand how the RFS promotes equity, and where its approach could be improved, all FSPs and field actors should be required to gather gender-disaggregated data and to include those data in the monthly reports.
- Improving equity and inclusiveness should be a continuous topic at stakeholder meetings.
- All stakeholders of the RFS value chain should be sensitised about the importance of mobilizing women, so that they increase the number of women participating in information and awareness raising sessions and ultimately in the borrower base.
- It should be ensured that the means are in place to enable HHs to access durable sanitation solutions rather than quick fixes, to avoid a relapse to OD.

[19] The opportunity cost of women being economically side-lined in Africa, is about USD 60 billion a year, the informal sector's is probably even higher (C.Duarte). ECA. March 2022

5. Summary of key findings

In Ghana, despite having one of the highest OD rates, a comparably strong (in the West African context) sanitation ecosystem has been in place prior to the programme. UNICEF's prior engagement through different sanitation programmes allowed to get the RRFS started effectively and is considered one factor that facilitated the pathway towards the on-going process to scale sanitation financing to the national level.

The RRFS' strong anchorage in the community context is another aspect that is assumed to have contributed to the achievements to date. This has resulted in solid verification of potential borrowers through the programme's partners. Moreover, it led to an adaptive programming approach that yielded a range of different funding mechanisms tailored to different local contexts, including two different mechanisms under the partnership with BSF that provides financing to households and SMEs and a voucher-based system under the DSF as well as the Social Fund targeting BoP borrowers (not subject of a detailed analysis in this Country Case Study).

The willingness of the team to test different approaches not only led to multiple funding mechanisms but also to allow for group loans or financing of solutions beyond the mere construction of toilets (e.g., biodigester systems).

By setting up SME financing, the programme in Ghana created potential to contribute towards the creation of a more sustainable sanitation economy. While high collateral requirements still limit the access of SMEs and service providers to the RFS, it already contributed to employment creation, capacitation, and increased collaboration among SMEs in the sanitation economy. As an example for the latter, the formation of an Association of SMEs involved in the construction of toilets in Tamale is worth mentioning as a systemic outcome that can be directly attributed to the fund.

The fund has facilitated the construction of 1'277 toilets, benefiting an estimated 8'366 people and is now moving towards scaling the BFS model at national level. The Country Case Study however shows that loan recovery rate still needs to be significantly improved and operational costs need to be reduced at all levels of the system to attain sustainability of the fund and move towards successful scaling.

While there is no blueprint solution to achieving this, a number of areas for improvement have been identified, including:

Set clear performance targets at different levels: Clear key performance indicators and related targets should be established and duly monitored at different levels of the RFS. This should include targets for recovery rates of loans for FSPs (target >95%), operational costs (target <5%) and number of loans deployed, among others.

Monitoring: At this moment there is no coherent and detailed enough monitoring and evaluation mechanism (including disaggregated data collection) in place that covers all stakeholders involved and is consistent across the MMDAs, region and countries to track progress in both project implementation and progress against WASH targets. This is considered a pre-requisite to identify cost drivers and ensure performance of partners at different levels, and to convince impact investors to become part of the RFS.

Analyse operational costs at different level: Throughout the country case study it has not been possible to obtain information on operational costs at different levels of the RFS. This information should be compiled and monitored to allow for a realistic analysis of the RFS costs.

Optimize processes: Explore how new technologies, including mobile-based communication / follow-up or software solutions for FSPs could be leveraged to reduce operational costs and increase loan recovery. Moreover, experiences to date should be used to standardize key processes. Horizontal learning among FSPs and other stakeholders could furthermore be organized to facilitate knowledge exchange and further optimize operations.

Cost coverage of FSPs: FSPs have not been able to cover their costs under the RFS fully, which is a key challenge for the sustainability of the fund. In cases of non-payment, FSPs have been reluctant to recover funds through collateral provided by borrowers and follow-up has not been prioritized, as loan sizes are considered too small. However, it is highly unlikely that FSPs will be willing to engage in a loan scheme under which they make continuous losses. The RFS should therefore engage with and support FSPs to improve their selection process and collection efficiency.

Loan portfolio: The current loan size is insufficient to cover the full costs for the construction of toilets, also due to increasing prices as a result of inflation. Moreover, loans are only provided for the construction of toilets (with the exception of a number of biogas systems) and are not made available for pit emptying or other steps along the sanitation value chain. Adapting the loan portfolio could increase customer satisfaction and facilitate 'repeat sales' (e.g., by providing pit emptying loans) to reliable customers, which could increase loan recovery rate and reduce costs.

Given the impact-orientation of the RFS, we consider it important to highlight the potential to improve the fund from a **gender and equity perspective:** In micro finance, engagement of female borrowers has long been established a key success factor to enhance fund performance. The number of female beneficiaries of the RFS however remains low, and it proves challenging to target female borrowers for sanitation due to the cultural and societal values in many regions of Ghana. It is therefore recommended to establish equity and inclusiveness as a continuous topic at stakeholder meetings, sensitize actors along the RFS value chain about the importance of mobilizing women and require FSPs to gather gender-disaggregated data.

The Ghanaian team has already successfully demonstrated the flexibility to cope with a range of challenges from the outset of the programme. This includes, for example, the challenge that at the outset there was a strong perception that if UNICEF is involved in a programme, it would be rather a grant-based than a commercial mechanism. The team successfully handled this challenge by putting the FSPs into the foreground of the initiative. The team similarly demonstrated a willingness to test lots of different approaches, to find suitable fund mechanisms (one of which is now moved towards scaling at national level). In the next phase, it will be imperative to use this flexibility to optimize the fund mechanism and processes to further improve the RFS' performance along key success factors (like loan recovery rate or operational costs).

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