



# UNLOCKING FINANCE FOR SANITATION IN WEST AFRICA. LEVERAGING DEVELOPMENT FUNDS TOWARDS COMMERCIALY SCALABLE SOLUTIONS

## SUMMARY

With the Revolving Fund for Sanitation (RFS), UNICEF set out to establish an innovative finance mechanism to contribute to ending open defecation (OD) in Africa. To contribute towards extending improved sanitation in West and Central Africa, the RFS funnels capital into financial institutions to offer a revolving, micro-credit fund to households and sanitation businesses. Since 2017, the RFS was rolled out in Ghana, Nigeria and later Togo.

This WASH Field Note presents some of the lessons learned and approaches taken to establish revolving sanitation funds in the three pilot countries. For this purpose, selected insights into the ecosystem background and the functioning of the RFS in each of the three countries are presented.

This document further outlines the key elements of a roadmap towards leveraging more commercial capital to scale the RFS. The presented scaling model recognizes that establishing an impact-oriented RFS is a complex and complicated endeavour. The RFS model to scale therefore provides a pathway comprising four main stages. In each of these stages the model provides targets, reference points and establishes milestones related to cost coverage, loan recovery, market reach and impact orientation with the intention to provide guidance to those responsible for either further enhancing existing RFS or establishing new ones.

## Background

As of 2022, 372 million people do not access basic sanitation services in UNICEF's West and Central Africa region. 119 million people have no toilet at all and practice open defecation (OD) (JMP). Over the past decades, a number of

development programs were set up to finance access to sanitation in line with Sustainable Development Goal (SDG) 6.2. However, the region remains off track to eliminate OD by 2030 and to achieve universal access to safely managed sanitation services (SDG 6.2). One of the reasons why development approaches have

struggled to advance sanitation coverage is that households are usually responsible for the first step of the sanitation value chain: securing a toilet facility in people's homes. Building a private toilet requires upfront expenditures, which poor and vulnerable households are commonly unable to afford. In the past, development programmes set out to subsidize and incentivize investments into toilets at household level. However, significant gaps remain as the sanitation sector is traditionally underfunded by governments and, even combined with Official Development Assistance (ODA), is insufficient to fill the sanitation financing gap.

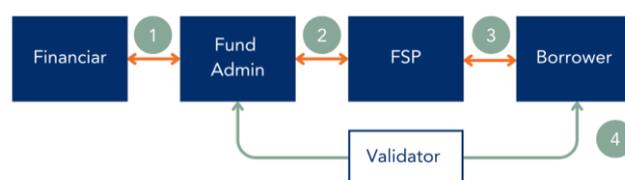
At the same time, a cost-benefit ratio of 4 to 1, if targeted towards the poorest wealth quintiles in Sub-Saharan Africa, constitutes a solid case for sanitation investments (Hutton, 2012). Past studies have confirmed that providing a credit or loan facility can be a critical driver of demand for sanitation products. Globally, several sanitation finance initiatives have succeeded in leveraging philanthropic and even commercial capital to provide affordable sanitation loans. The most prominent example is the recent announcement that water.org has mobilized USD 1 billion in capital for water and sanitation solutions for poor families. Similarly, the Dutch organisation WASTE has collaborated with Actiam, an asset manager focusing on sustainability to facilitate sanitation finance through the FINISH Mondial initiative. At the core of these initiatives lies the adaptation of Micro Finance solutions to incentivize investments into sanitation by households and small private sector actors like masons, artisans or other businesses providing sanitation solutions. In West and Central Africa however, commercial microfinance to date remains mostly absent in the sanitation market for the Base of the Pyramid<sup>1</sup>. It can therefore be concluded that SDG 6.2 remains out of reach while limited public and development finance is insufficient to extend improved

<sup>1</sup> The bottom of the pyramid, bottom of the wealth pyramid or the bottom of the income pyramid is the largest, but poorest socio-economic group. In global terms, this is the 2.7 billion people who live on less than \$2.50 a day.

sanitation services. At the same time, more commercial funds remain untapped, because the sanitation investment case has not been translated into a commercially viable model that would attract much-needed finance.

To leverage additional financing towards reaching SDG 6.2 in West and Central Africa, UNICEF country offices set out to establish an innovative finance mechanism for sanitation that funnels capital into financial institutions to offer a revolving, micro-credit fund to households and sanitation businesses: The Revolving Fund for Sanitation (RFS). In Ghana, Nigeria and Togo, this fund financed by UNICEF and other financiers injects funds that are managed through a fund administrator (1). The fund provides funding as loans to Financial Service Providers (FSPs)<sup>2</sup> at 0% - 2% interest rates (2). The FSPs then provide micro-loans to borrowers (households, toilet business owners and more recently to sanitation businesses) at below-market interest rates (3). Once the sanitation facility is constructed and verified (4), the loan is repaid back to the FSPs, who then repay the RFS at the regulating entity. This cycle is then repeated in a revolving manner with the initial capital.

**Figure 1: The Regional Revolving Fund for Sanitation (RRFS)**



Source: The Authors

To play a relevant role in filling the sanitation financing gap and contribute towards achieving SDG 6.2, the RFS has to become financially viable and build a convincing investment case that

<sup>2</sup> Financial Service Providers include microfinance institutions (MFI) and NGOs offering similar functions.

<sup>3</sup> Financial Inclusion Improves Sanitation and Health

can leverage additional philanthropic and commercial resources for sanitation financing.

This field note presents some of the lessons learned and approaches taken in Ghana, Nigeria, and Togo to establish revolving sanitation funds. It further outlines the key elements of a roadmap towards scaling these country level RFS and possibly establish a regional fund.

## The RFS in Ghana, Nigeria and Togo

The RFS was originally initiated in 2017 by UNICEF as an innovative financing mechanism for sanitation and rolled out in Ghana, Nigeria and later Togo. The functioning of the mechanism is adapted to the ecosystem in each country.

### Ghana

- **Ecosystem background:**

The RFS in Ghana builds on nearly a decade of experience of programmes working to promote sanitation and end open defecation led by UNICEF, the Government of Ghana, and multiple other partners. The national water and environmental sanitation policies and related strategies, overseen by Metropolitan, Municipal and District Assemblies (MMDAs), are part of the measures implemented by the government to improve access to sanitation and move towards ending OD in the country. Despite some progress, access to basic sanitation services remains limited in Ghana and the SDG 2030 targets will likely not be reached. Currently, at the local level, households wishing to construct a facility have access to various sanitation financing options, including out-of-pocket payment, commercial loans (with interest rates between 26 – 40%), village savings and loan associations or informal lending.

- **Functioning of the RFS in Ghana:**

<sup>4</sup> The Basic Sanitation Fund (BSF) targets urban areas and provides funds to both households and toilet and sanitation SMEs, while the District Sanitation Fund (DSF) implements a

The RFS is jointly funded by UNICEF and donors, including the Government of the Netherlands and Canada, and administered by a fund administrator respectively for the Basic Sanitation Fund (BSF) and District Sanitation Fund (DSF).<sup>4</sup> The programme engages 17 financial service providers through a competitive tendering process for a tenure of 12 months, after which the loan amount has to be repaid to the Fund Administrator. The BSF targets urban and peri-urban areas and provides funds to both households and sanitation SMEs, while the DSF implements a cashless system that provides vouchers to households who then hire SMEs. This fund adaptation to basic and district versions is unique to Ghana. The MMDAs are key actors in the communities through dedicated WASH Committees that trigger awareness for sanitation and hygiene, propose and help vet borrowers to the FSPs and assure quality of the constructed latrines, while also ensuring that loans are disbursed in a transparent and unbiased manner and that they are duly repaid.

### Nigeria

- **Ecosystem background:**

The national decision-making structure on financing and development programming requires a strong involvement of the Government of Nigeria, which has demonstrated political commitment, developed sanitation policies, ODF Road Maps, the Clean Nigeria Campaign to end OD, and other initiatives. However, the provision of basic WASH services has simply not been able to keep up with the exploding population growth, which more than doubled in the past two decades and thus, despite the progress, only 31% of the population currently have access to safely managed sanitation services (JMP, 2020). Funding to reach national targets

cashless system that provides vouchers to HHs who then hire SMEs.

particularly in rural areas is estimated below 50%, starkly highlighting a gap between current financing and the projected need. Nigeria's National Water and Sanitation Policy (2004) encouraged private-sector participation, which is promoted among others through the Small and Medium Enterprise Development Agency and regulation regarding microfinance institutions. Microfinance Institutions (MFIs) have used their own funds to lend to households to build improved toilets and access a basic level of sanitation service using microfinance, however, conditions may not be affordable for everybody. Adashes, Community Savings and Credit Groups who support households with funds needed to construct non-shared, improved toilets, exist in several states.

- **Functioning of the RFS Nigeria:**

The RFS in Nigeria has thus far been tested in Bauchi State in the north of Nigeria. It is administered by the governmental Rural Water and Sanitation Agency (RUWASSA). RUWASSA provides the funds at a 0% interest rate to MFIs. The selection, tenure and repayment structures are similar to Ghana. Local Government Area (LGA) WASH Units, and later local WASH Committees (local voluntary entities created by UNICEF), conduct sensitization about the benefits of improved sanitation and monitor the use of sanitation loans the ground. Interestingly, in Nigeria, households do not receive the money themselves. They apply together with a Toilet Business Owner, who then receives the loan to build the toilet for the household and collects the loan repayment and interest rate from the beneficiary household. The RFS in Nigeria also recently launched loans for Toilet Business expansion.

In 2020, 45,2% of the inhabitants were still practicing open defecation, a figure that is much higher in rural areas (around 70%). In 2015, the Directorate of Hygiene and Sanitation was created within the Ministry of Health. Previously sanitation had not been strongly prioritized and suffered from underinvestment. Togo has set the ambitious goal to end OD by 2030 and has adopted the Community-Led Total Sanitation approach and a sanitation roadmap, mechanisms that helped pave the way towards ending OD in other countries. The RFS launched in 2020 was the first Sanitation Financing programme in Togo targeting households as consumers. Outside the RFS, households mostly rely on self-financing, MFIs or informal lending.

- **Functioning of the RFS Togo:** In Togo, the RFS starts with UNICEF and a donor (KOICA) contributing to a joint Sanitation Fund that is spread among selected municipalities and administered by the CACs (Municipal Sanitation Committees). The CACs are central to the RFS's implementation. Their roles are to a) provide the funds at 0% interest rate to MFIs; b) facilitate loan disbursements to households, advise on the material supplies from the first loan instalment; c) select, train and approve masons before they start construction work; and d) monitor the toilet installation to unlock the second loan instalment. Most of the households are gathered in solidarity groups of 5 and keep each other informed of the repayment schedule. Despite its recent launch, the RFS in Togo managed to disburse a significant number of sanitation loans and reached different types of target groups including farmers, households, and commercial target groups as well as persons with disabilities, which motivated communities and municipalities to engage.

## Togo

- **Ecosystem background:**

The below table highlights key data for each country on the context and functioning of the RFS:

<sup>3</sup> <https://www.worldometers.info/world-population>

**Table 1: Snapshot of Revolving Funds for Sanitation in 3 countries\***

Data from October 2022	GHANA	NIGERIA	TOGO
Population	31 million	218 million	8.3 million
Population practicing OD	17.8%	18.7%	45.2%
Committed loan amount	910 000 USD	91 485 USD	454 855 USD
Share of UNICEF	27.5%	50%*	47%*
Share of other donors	73% (Gov. of Netherlands & Canada)	50% (Gov of Nigeria)*	53%* (KOICA)
# of FSP involved	17	3 (in Bauchi State)	5 MFIs (9 branches)
Interest rate for FSP	2% for BSF, 0% for DSF	0%	0%
Tenure for FSP	12 months for BSF <36 months for DSF	12 months	12 months
Borrower	Household and SMEs	Toilet operator	Group of households
Interest rate borrowers**	12 - 15%	Max. 9%	6%
Tenure for borrowers	12 months	6 – 7 months	12 months
# of HH loans disbursed	1 665	1 066	1 459
HH Loan size for new toilet	3 200-3 500 GHS (~250-275 USD)	~42 000 NGN (~97 USD)	~70 000 FCFA (~104 USD)
Loan repayment rate HH	DSF ~71%, BSF ~62%	66% – 97%	~47%
# of toilets completed**	1 441	926	1 211

\* All countries have elements of Stage 0 and Stage 1 in place but need further consolidation of proof of concept

\*\*Interest rates determined based on consumer feedback and negotiations with FSPs and Ministries of Finance.

\*\*\*Of the total programme costs, not only of the loan amount

**Table 2: Evolution of Financing Mechanisms**

	GRANT	HIGHLY SUBSIDIZED FINANCE	BLENDED FINANCE	IMPACT FIRST FINANCE	FINANCE WITH IMPACT	ESG	COMMERCIAL
DESCRIPTION	Intervention is financed through non-repayable grants	Grant is given to an intermediary which lends until no more money is left	Multiple capital providers with different risk expectations combine in one structure	Impact investors with key focus on impact and willing to absorb certain losses	Impact investors which need to achieve financial returns	Investors which follow ESG-criteria	Pure financial investors
INTEREST RATE FSP	0 %	0 % - low	below market	below market	close to market	market	market
INTEREST RATE BENEFICIARY	0 % - very low	below market	below market	below market	close to market	market	market
LOSS ABSORPTION CAPACITY	100 %	100 %	depending on provider: 100 % - 0 %	10 % - 50 %	0 %	0 %	0 %
INVESTMENT CLIMATE / FX	n/a	n/a	Medium	Medium	High	Very high	Very high
MARKET SIZE	small	small	small, growing	small, growing	middle, growing	large	huge
LOCAL PROVIDERS	Government / NGO	Government / NGO	Government / NGO	NGO	Impact investors	ESG investors	Commercial investors
INTERNATIONAL PROVIDERS	Governments / Worldbank / UN organizations / NGO	Governments / Worldbank / UN organizations / NGO	Governments / Dev Agencies / UN organizations / NGO / Impact Investors	Impact First investors (5% of impact investors)	Impact investors (95% of impact investors) / DFIs	ESG investors / IFC	Commercial investors

## Evolution of financing mechanisms

The typical evolution of new financing mechanisms in developing markets moves from grants to different forms of finance that have more commercial traits (see table 2). This evolution goes hand in hand with changes of key characteristics of financing along this evolution: Loss absorption capacities of financiers is high at the beginning, when non-repayable grants are used to provide loans with high default rates. The same applies for highly subsidized finance that can allow spending funds until no money is left to revolve. Loss absorption capacity then reduces for different forms of blended finance and impact first investments, for which some capital providers are still willing to absorb certain losses but to a much more limited extent. The more commercial forms of finance include investments with impact, investments based on Environmental, Social and Governance (ESG) criteria and commercial finance, which can be considered not willing to absorb losses. Interest rates and market size for financing mechanisms develop in the opposite direction, growing with more commercial forms of finance.

## Moving towards scaling

In contexts like Ghana, Togo, Nigeria and most other countries in West and Central Africa, development finance at the outset mostly gains ground through grants. The first years of experience implementing the RFS have allowed the country teams to create a foundation for market-based demand for sanitation solutions. Throughout 2022, UNICEF in cooperation with cewas, a consultancy firm, reviewed the progress, achievements and lessons learned from the RFS as a basis to strategize on how to leverage more commercial forms of finance and scale the revolving fund for sanitation. To the background of the above-

described evolution of finance mechanisms, it becomes clear that a mechanism like the RFS still needs to work on increasing the loan recovery rate of financial service providers to make the program sustainable and broadly attractive. As the market reach needs to grow, it also becomes increasingly important to reduce operational and overhead costs to achieve cost coverage out of the interest margin, without having to rely on grant funding to cover costs. With the impact orientation of the RFS, it is equally important to avoid a mission drift through the efforts to scale the fund.

The model to scale that was derived from the evaluation of the RFS builds on four key performance indicators and related targets that determine whether UNICEF's objectives can be achieved through a sustainable and scalable revolving fund.

**Cost coverage:** To move towards a scalable model of the RFS, fund administrators and FSPs have to implement the RFS in a cost-covering manner. In practical terms, this means that the interest each of these actors collects must exceed or at least match the losses through payment defaults and operational costs.

**Loan recovery:** In moving towards a cost covering system, the loan recovery rate is a critically important performance indicator. In order to align with the RFS objectives which require the fund to offer sanitation loans at low interest rates, the loan recovery rate needs to achieve a near 100% target.

**Market reach:** To achieve the RFS objective of contributing towards ending open defecation, the current funds in Ghana, Nigeria and Togo need to significantly increase their market reach. For this purpose, the scaling strategy needs to consider how the current fund mechanisms can either grow to reach an amount of customers that constitutes a

significant contribution towards ending OD, or be replicated (potentially in adapted forms) by other actors (including but not limited to FSPs).

**Impact:** With the RFS, UNICEF seeks to accelerate the rate at which basic sanitation services are available to households from the poorer wealth quintiles and vulnerable groups with the goal to end OD. For this purpose, the effective targeting of the sanitation loans towards these households is key.

Rolling out an impact-oriented Revolving Fund for Sanitation is a complex and complicated endeavour. The RFS model to scale therefore provides a pathway comprising four main stages (compare figure below), to provide reference points and establish milestones in a somewhat chronological order that is meant to provide guidance to those responsible for either further enhancing existing RFSs or establish new ones. The following sections synthesize

selected aspects of the scaling model that are important at each of these stages.

**Figure 2: Stages of the RRFS scaling model**



Source: *The Authors*

**Table 3: Key ecosystem requirements and targets at different stages of the scaling model for the RRFS**

Ecosystem development		Setting up and rolling out	Optimising	Engaging investors
<p>Clear political commitment, legal framework, strategy, budget and implementation</p> <p>Awareness raising and behavioral change campaigns, coordination platforms</p> <p>Shift away from free sanitation solutions by development programmes</p> <p>Microfinance regulation and capacity building</p> <p>SME availability and capacity</p>	<b>Cost coverage</b>	<p><b>Administrative cost for the fund should remain</b></p> <ul style="list-style-type: none"> <li>below 30% for the fund administrator</li> <li>below 15% for the FSPs</li> </ul>	<p><b>Further reduction of administrator costs</b></p> <p>FSPs reach full cost coverage</p>	<p><b>Set up an independent fund structure that reduces the layers and related administrative cost</b></p> <p>Push admin costs of financial service providers below 3%</p>
	<b>Loan recovery</b>	FSPs can, on average, exceed 90% loan recovery rates	FSPs must increase loan recovery to at least 95%.	Increasing loan recovery to > 97%
	<b>Market reach</b>	Finance the development of a sufficient number of validated sanitation facilities to show potential for market impact (e.g., 3 000 to 5 000)	Financing of at least 10 000 validated sanitation facilities and establishing a setup with suitable partnerships to cover a market for at least 50 000 additional loans during the next stage	Scale the RRFS through constant growth in disbursement of sanitation loans
	<b>Impact*</b>	At least half of the loans yield sanitation facilities for households from the poorest population quintiles	Maintain and improve the impact performance of the fund	<p><b>Set measures to maintain impact-orientation, as additional actors are on-boarded.</b></p> <p>Pro-poor targeting increased (75% from poorest population quintiles)</p>

\* Both literature (compare e.g. D'Espallier et al., 2010) and investors consulted throughout the assignment highlight that the share of female borrowers is a key success factor in micro finance. The UNICEF country teams highlighted that in the cultural context in West Africa, men are typically responsible for housing investments and therefore constitute the main target group of sanitation loans. It is nevertheless recommended to establish an approach to target female borrowers and establish a related impact target.

## 0 Ecosystem development

The country studies and exchanges with UNICEF teams and partners show that there are certain conditions for success that should be in place or need to be established to succeed with an RFS. The RFS scaling model considers aspects of the sanitation sub-sector, of the micro-finance landscape and the overall context. For the sanitation sub-sector, clear political commitment to improve sanitation services, a national sanitation strategy, implementation plan and budget and key pillars of a supportive legal framework are considered conditions for success, alongside preceding or on-going awareness raising and behavioral change campaigns, coordination platforms and a shift away from development programmes that offer free sanitation solutions, except in instances where targeted subsidies with a clear selection criteria are determined necessary for the poorest and most vulnerable households. For revolving sanitation loans to succeed, existing microfinance structures are equally important. In this field, proper regulation of the microfinance sector, a pool of suitable FSPs in the geographical focus area (including decentralized structures to reach the targeted communities) and their capacities and level of professionalization are key. Moreover, the ability of households and sanitation businesses to qualify for sanitation loans needs to be considered, including the overall context, initial demand for market-based sanitation solutions, and buy-in from public authorities, as well as the availability and capacity of suitable SMEs and their access to materials, technologies and know-how.

While a supportive ecosystem is essential for the success of a revolving sanitation fund, UNICEF recognizes that particularly in countries where such financing is needed the most, there may still be critical gaps in the ecosystem. To this end, the above-mentioned aspects should be duly considered when setting up an RSF. Before and during the implementation of the fund, mitigation

measures for those gaps should be considered and addressed.

## 1 Setting up & rolling out

Throughout the process of setting up and rolling out a RFS, a functioning financing mechanism should prove both the potential 1) for end-user financing (households and businesses) to enhance sanitation coverage and 2) that the fund could become scalable. To this end, the scaling model suggest targets in relation to all key performance indicators that help strike the balance of what can be realistically achieved in the first year(s) of an RFS and showing the potential of the fund to become financially viable. In this sense, administrative cost targets for the fund administrator should remain below 30% and below 15% for the involved MFIs. Similarly, at this stage of the scaling model an RFS should generate evidence that MFIs can, on average, achieve more than 90% loan recovery rates. With regards to market reach, an RFS should finance a sufficient number of validated sanitation facilities to show potential for market impact. In exchange with the UNICEF teams and several external experts, the financing of 3'000 to 5'000 facilities (depending on the target market) was established as a target value at this stage of the scaling process. Finally, the targeting of sanitation loans should demonstrate that at least half of the loans yield sanitation facilities for households from the poorest population quintiles and at least 50% of borrowers are local businesses (in case of SME loans). Similarly a target for the share of female borrowers should be established.

## 2 Optimizing

At the optimisation stage of the RFS, the fund needs to be streamlined to match the Loss Absorption Capacity of (impact/philanthropic) investors. At the same time, the impact of the fund should be further enhanced, to move towards achieving the RFS' goal of ending open defecation and supporting households in West and Central Africa to move towards safely managed

sanitation services. At this stage, the administrative costs at the level of the fund administrator need to be further reduced compared to stage 0, and participating FSPs must reach full cost coverage. To achieve this, FSPs have to increase loan recovery to at least 95%. Moreover, the RFS has to showcase the potential to scale market reach. For this purpose, two targets are set: 1) the financing of at least 10 000 validated sanitation facilities and 2) extending the target area and partnerships to be able to cover a market where at least 50 000 additional sanitation loans can be disbursed in the following years. At the same time, the impact performance of the fund needs to be maintained or even improved (e.g., when it comes to the share of female borrowers).

### 3 Engaging Investors

Engaging investors is key to leveraging additional capital to scale the market reach and impact of the RFS. This process goes hand in hand with several structural changes to the fund, including setting up an independent fund structure that reduces the layers and related administrative cost. With additional actors joining the bandwagon, it is also imperative to establish measures that maintain the impact orientation of the RFS. To this end, the ambition of pro-poor targeting of sanitation loans should be increased even further (suggestion: 75% of sanitation facilities financed for households from the poorest population quintiles). Moreover, the engagement of (impact/philanthropic) investors should go hand in hand with further performance enhancement (pushing admin costs of FSPs below 3% and increasing loan recovery to > 97%) and constant growth in loan disbursements.

Aside from these scaling targets, the project yielded key milestones, some of which are also reflected in the next section on lessons learned.

## Lessons learned for RFS optimization and scaling

**Stakeholder and community involvement:** Key to the achievements to date has been the involvement of the relevant sector actors in the pilot of the RFS, which increases collaboration and anchors the mechanism at community level. This allowed to tailor different funding mechanisms to different local contexts, as shown in Ghana where one mechanism provides financing to households and SMEs and the other functions through a voucher-based system.

**On the ground presence:** Related to quality assurance, both the FSPs and at least one other actor responsible for outreach, engagement and validation have the capacity to be present on the ground. This ensures that repayment collection is easily available and accessible and followed-up on.

**Repayment rates:** RFS has been successful in testing and establishing a micro-loan system for household sanitation in three countries, showing the potential for end-user financing in this sub-sector. International investors consulted on the RFS recommended to work towards market-based returns (which are in the range of 15% but can vary significantly from country to country), to ensure sustainability of the RFS. So far, the repayment rates are too low and reduce the size of the fund significantly upon revolving it.

**Targeting, Gender and inclusion:** Targeting female borrowers for sanitation is challenging due to the cultural and societal values in the current program areas. However, given the impact-orientation of the RFS, focusing on a gender and equity perspective as part of the fund implementation is crucial to attract investors, since in microfinance, engagement of female borrowers has long been established as a key success factor to enhance fund performance (D'Espallier et al. 2010). The RFS should also assign clear specifications to the selection of borrowers to tailor its targeting mechanisms more

strongly to the poorest quintile and inclusion of persons with disabilities to maximize impact.

**Realistic interest rates:** RFS actors need to strike the right balance of interest rates. Stakeholders highlighted that below-market interest rates can undermine the development of a market for sanitation loans and put off (impact) investors that provide the capital necessary for scaling. While interest rates should be realistic for targeted consumers, a do-no-harm principle should also be applied towards the functioning of established micro finance markets, where loan products have been established with interest rates oriented around the market conditions in each of the respective countries.

**Monitoring:** A monitoring and evaluation mechanism consistent across districts, region, and countries helps to track progress against WASH targets, cost drivers, and provide data for investor engagement. The suggested model for scaling the RFS provides key performance indicators, targets and milestones that could serve as a basis to establish a suitable monitoring system.

**Quality assurance and risk management:** To ensure quality and impact orientation, clear processes and relevant and accurate selection criteria should be defined. Moreover, many FSPs require capacity building, guidance, and quality assurance on the correct use of protocols and proceeds. Periodic risk assessments to review the financial structure and functioning of the fund are equally recommended to establish suitable risk mitigation measures and pro-actively respond to emerging challenges, if necessary.

**Exploring new technologies** for increased efficiency including mobile-based communication / follow-up or software solutions for the RFS or individual FSPs could be leveraged to reduce operational costs and increase loan recovery.

**Support throughout the sanitation value chain:** To leverage the RFS towards enhancing

the capacity of SMEs as well as actors along the sanitation value chain, sanitation loans should be extended beyond financing toilet construction to include other relevant sanitation solutions like pit upgrading, pit emptying or decentralized treatment solutions, among others, to establish sustainable sanitation solutions.

## Conclusions

The achievements and lessons learned gained throughout the initial years of the RFS in Ghana, Nigeria and Togo testify to the need for revolving financing mechanisms as a key tool to extend access to basic sanitation services through market-based approaches.

To play a relevant role in filling the sanitation financing gap and contribute towards achieving SDG 6.2, the RFS has to become financially viable and build a convincing investment case that can leverage additional philanthropic and commercial resources for sanitation financing.

To achieve this, a scaling model has been developed that evolves around four key performance indicators: Cost coverage, loan recovery, market reach and a clear impact orientation. Recognizing the complexity of sanitation financing, the RFS will need to continue its efforts to enhance performance around these indicators to establish a sustainable mechanism that can have a systemic effect on sanitation markets. This optimization of the RFS requires systematic performance monitoring, testing and evaluation of context specific strategies and tactics and systematic learning both from the experiences of the RFS as well as with and from actors engaged in sanitation financing in West Africa and globally.

The reflection and strategic pointer presented in this WASH Field Note are one of UNICEF's contributions towards this learning journey around innovative sanitation financing.

## KEY POINTS

- *Revolving sanitation finance bears potential to be a key tool to end open defecation, extend access to non-shared, improved toilet facilities, and move households towards safely managed sanitation services.*
- *The RFS in Ghana, Nigeria and Togo offer insights into different context adapted approaches to finance household sanitation*
- *The complexity of sanitation finance has to be recognized, which is why a revolving fund is established and scaled through different stages*
- *Cost coverage, loan recovery, market reach and impact orientation are key performance indicators to scale the RRFS*

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JMP: Joint Monitoring Program  
<https://washdata.org/>

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scaling model developed and outlined in this WASH field note. Moreover, the support of UNICEF's regional office for West and Central Africa has been essential for strategic orientation of cewas' work to support the RRFS throughout this assignment. Last but not least the insights and guidance provided by experts from more than twenty investors that were engaged at different stages of this work merits special thanks.

## About the Authors

Janek Hermann-Friede, Senior Project Manager and innovative financing specialist at cewas.

Johanna von Toggenburg, Project Manager at cewas with a focus on market based approaches.

Hannah Wuzel, Project Manager at cewas with a focus on end-user financing and entrepreneurial WASH solutions.

Reto Wey, Director of Toilets for All, Senior advisor and Investment Specialist

Juliette Gabrion, Project Manager at Young Water Solutions

*This field note was reviewed by Jolly Ann Maulit and Olivier Floriant Sieyadji from the UNICEF West and Central Africa Regional Office, and from UNICEF Headquarters by Bisi Agberemi, Andrew Narracott, and Anu Paudyal Gautam.*

## About the Series

UNICEF's water, sanitation and hygiene (WASH) country teams work inclusively with governments, civil society partners and donors, to improve WASH services for children and adolescents, and the families and caregivers who support them. UNICEF works in over 100 countries worldwide to improve water and sanitation services, as well as basic hygiene practices. This publication is part of the UNICEF WASH Learning Series, designed to contribute to knowledge of good practice across UNICEF's WASH programming. In this series:

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*Field Notes* share innovations in UNICEF's WASH programming, detailing its experiences implementing these innovations in the field.

*Guidelines* describe a specific methodology for WASH programming, research or evaluation, drawing on substantive evidence, and based on UNICEF's and partners' experiences in the field.

*Reference Guides* present systematic reviews on topics with a developed evidence base or they compile different case studies to indicate the range of experience associated with a specific topic.

*Technical Papers* present the result of more in-depth research and evaluations, advancing WASH knowledge and theory of change on a key topic.

*WASH Diaries* explore the personal dimensions of users of WASH services, and remind us why a good standard of water, sanitation and hygiene is important for all to enjoy. Through personal reflections, this series also offers an opportunity for tapping into the rich reservoir of tacit knowledge of UNICEF's WASH staff in bringing results for children.

*WASH Results* show with solid evidence how UNICEF is achieving the goals outlined in Country Programme Documents, Regional Organizational Management Plans, and the Global Strategic Plan or WASH Strategy, and contributes to our understanding of the WASH theory of change or theory of action.

*COVID-19 WASH Responses* compile lessons learned on UNICEF's COVID-19 response and how to ensure continuity of WASH services and supplies during and after the pandemic.

Readers are encouraged to quote from this publication but UNICEF requests due acknowledgement. You can learn more about UNICEF's work on WASH here: <https://www.unicef.org/wash/>

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United Nations Children's Fund  
3 United Nations Plaza, New York, NY 10017, USA

For more information, please contact: [WASH@unicef.org](mailto:WASH@unicef.org)