

Annual Report 2023

Building Sanitation Economies and Menstrual Health Markets for a Sustainable Future

50%

0%

75%

100



© The Sanitation & Hygiene Fund 2024

All rights reserved. The reproduction of any materials from this publication must be accompanied by a full citation.

The views expressed in this publication are those of the authors and do not necessarily reflect those of the United Nations. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of UNOPS.

All reasonable precautions have been taken by UNOPS to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied.

The responsibility for the interpretation and use of the material lies with the reader. In no event shall UNOPS be liable for damages arising from its use.

This report may be cited as follows: The Sanitation & Hygiene Fund. 2024. Annual Report 2023. UNOPS, Geneva, Switzerland.

For more information: SHF Website: <u>www.shfund.org</u>

Cover and this page: © Shutterstock



Ministry of Foreign Affairs

Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Agency for Development and Cooperation SDC



Contents

List of Acronyms	4
About SHF	5
Message from the Board Chair	6
Message from the Executive Director	7
1. 2023 in a glance	8
2. Delivering sustainable solutions for sanitation, hygiene and menstrual health	10
BOX 1: Leveraging opportunities for catalytic impact in sanitation, hygiene and menstrual health	e 12
3. Laying the foundations for thriving sanitation economies and menstrual health markets	13
BOX 2: The Sanitation Value Chain	16
4. From missing markets to development opportunity: The power of catalytic financing	17
BOX 3: Championing women's leadership for sanitation, hygiene and menstrual health	20
BOX 4: Sustainable sanitation, MHH, and climate change	22
5. Scaling local solutions: Spotlights on implementation	23
Spotlight on implementation: Kenya	25
BOX 5: Citywide Inclusive Sanitation	26
Spotlight on implementation: Uganda	27
6. The Next Catalytic Investment Opportunity: Transforming the MH Market	28
7. Strategic Stewardship	31
Collective Impact for Our Collective Future: Nurturing Strong Partnerships	33
Changing the narrative around sanitation, hygiene and menstrual health	34
8. Forward Look	36
Endnotes	38

List of Acronyms

CWIS	City Wide Inclusive Sanitation
IFC	International Finance Corporation
IFI	International Finance Institution
ISO	International Standards Organization
GLAAS	UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water
HR	Human Resources
MH	Menstrual Health
МНН	Menstrual Health and Hygiene
MSME	Micro, Small and Medium Sized Enterprises
SDC	Swiss Agency for Development and Cooperation
SDGs	Sustainable Development Goals
SHF	Sanitation and Hygiene Fund
ΤΑ	Technical Assistance
WASH	Water, Sanitation and Hygiene

WHO World Health Organization



About SHF

The United Nations' Sanitation and Hygiene Fund (SHF) is dedicated to achieving universal access to sanitation, hygiene and menstrual health (MH) through market-based approaches. SHF works with Low- and Middle-Income Countries (LMICs) to build robust and climate-resilient sanitation economies and MH markets through catalytic financing.

We do this by working in partnership with governments, development partners, development financing institutions, civil society organizations and the private sector to tackle barriers to inclusive growth and accelerate sustainable markets. We put women and girls - their choice and agency - at the center of our approach, with gender responsiveness being integrated into the design and delivery of sanitation, hygiene and menstrual health products and services thereby contributing to human, social and economic development outcomes. By promoting circular and sustainable sanitation, hygiene and menstrual health value chains, we support climate mitigation and adaptation, and minimize environmental impact.

Our scope

Our scope includes two distinct yet interconnected areas that form a well-defined focus within Sustainable Development Goal (SDG) target 6.2 on Sanitation and Hygiene¹:

- Sanitation economies, comprising all aspects of the safely managed sanitation value chain, to ensure that human waste, wastewater and solid waste is managed in a way that is safe, environmentally sound, and socially acceptable. This extends to products and construction, maintenance and use, containment, emptying, transport, treatment (including wastewater) and safe disposal and reuse; we specifically focus on non-sewered sanitation solutions promoted under, for example, the citywide inclusive sanitation (CWIS) approach.
- The menstrual health (MH) market, comprising targeted interventions that are designed to transform the MH market to ensure people who menstruate have access to a variety of quality menstrual health and hygiene products at a price they can afford and with minimal environmental impact. This reflects across the MH value chain, including: raw material production and processing, manufacturing, transportation, distribution to the last mile, user education and demand generation. Activities to shape and design markets to improve this core function cover three broad areas - building an enabling environment of rules, regulations, policies and taxes; supporting the development of effective, sustainable and scalable business models to ensure access to low-income users; and providing access to financing to scale effective models.

Message from the Board Chair

Challenging the status quo has been at the heart of the UN's Sanitation and Hygiene Fund (SHF) since its inception three years ago. In a fast paced increasingly complex and fragmented world, innovation, collaboration and partnership are essential to make a difference.

SHF is uniquely positioned to mobilize the diverse set of actors needed to transform sanitation and hygiene systems and improve menstrual equity, thereby changing the life trajectory of millions, including women and girls, while addressing the massive climate risk that current sanitation approaches represent. Not only is lack of access to sanitation and hygiene caused by inequality, it also exacerbates further inequalities, holding back girls and women from reaching their full potential.

The upcoming Summit of the Future is partly anchored on the urgent and visible need for change. While acknowledging the significant achievements, the limits of current approaches to financing for development are evident, particularly as we approach the final lap of the 2030 Agenda. The multilateral system will continue to play a fundamental role. For sanitation, hygiene and menstrual health specifically, there is no question, in these times of unprecedented challenges, that existing approaches are failing and leaving most of the population behind.

Yet, it takes a bold vision and a good amount of risk-taking to rewrite the narrative around sanitation, hygiene and menstrual health. Thanks to its forward-looking donors, Switzerland and the Netherlands, SHF has been able to develop a new model, fit for the future, with the potential to revolutionize how sanitation, hygiene and menstrual health are perceived and financed.

SHF aims to catalyze the massive investment potential that this sector offers. Our approach is not only game changing for sanitation, hygiene and menstrual health, it also offers an innovative financing model that could easily be applied across other sectors.

Complex issues cannot be tackled alone, and one of SHF's biggest strengths has been its ability to convene public and private partners to design solutions tailored to specific country contexts. In 2023, SHF worked closely with the Governments of Kenya, Nigeria and Uganda to lay the foundations for thriving sanitation economies. Moving forward, SHF plans to expand its approach to many other countries, and beyond Africa, striving in particular to build South-South partnerships.

As SHF plans to take stock of progress achieved, and starts preparing its new strategy for 2026-2030, SHF is committed to raise its ambition and ensure that its model is inclusive of everyone, and in particular girls, women, young people, and those left behind. SHF will also focus on building sustainable sanitation systems, ensure that these are climate-resilient and that we are well-equipped to deliver more sustainable private sector solutions.

Building resilient sanitation economies means powering local businesses, communities and economies, at each stage of the value chain. With our gender- and climate-focussed projects and partnerships, we are excited to be contributing to this bedrock for sustainable societies, hedging against future environmental and health risks especially in a rapidly warming planet.

This goal is ambitious, but important strides have already been made in 2023, and we are excited about the future.

Weller tomat

Cecilia Akintomide | Chair, The Sanitation and Hygiene Fund (SHF)

Message from the Executive Director



In March of 2023, the United Nations held its first Water Conference in nearly 50 years, a crucial global moment acknowledging the centrality of water, sanitation and hygiene in achieving the 2030 Agenda. One year later, a UN System-wide Strategy for Water and Sanitation has just been endorsed, offering a unique opportunity to strengthen cooperation and accelerate results for these pivotal pillars of a sustainable future.

With nearly half the world lacking access to safely managed sanitation, 2.3 billion people without access to basic hygiene facilities, and 500 million menstruators lacking needed products to safely manage their menstruation, business as usual is no longer an option.

Over the past three years, the Sanitation and Hygiene Fund (SHF) has created a sea change in the way we view and fund the sanitation economy and menstrual health market, bringing a much needed spotlight on the massive investment opportunity these represent.

In Nigeria alone, the sanitation economy is currently valued at \$5.8 billion and projected to grow to as much as \$12.5 billion by 2030 once universal access is achieved. Meanwhile, about 800 million people in LMICs are ready and willing to pay for reusable menstrual products. This is an incredible opportunity.

As we aim to unlock additional public and private investments, our ultimate goal remains to achieve prosperity and gender equality, mitigate climate change and protect the environment, and contribute to human health and economic development. At SHF, we believe that no one should be left behind and that financially smart investments can also be investments in a sustainable, equitable future for all.

SHF is working closely with countries and a range of public and private sector partners to design and scale catalytic financing models to support the development of thriving sanitation economies and menstrual health markets, with a focus on off grid sanitation where investments have been scarce.

In 2024, we aim to leverage climate finance to further scale sustainable sanitation models. We will also harness gender impact investing and ensure that our approach delivers gender transformational outcomes. Finally, we will continue pushing the frontier of the menstrual health market to significantly increase access to renewable menstrual products.

As we enter our next phase of growth, we value the support of our visionary funders, the Kingdom of the Netherlands and Switzerland, who have allowed us to revisit financing for development, and to develop a unique catalytic funding mechanism for sanitation, hygiene and menstrual health.

In 2024, we will continue to move the needle on these fundamental issues that underpin public, economic and environmental health, while launching the sector's first ever catalytic financing partnership and making a difference in the lives of many.

M.

Dominic O'Neill | Executive Director, The Sanitation and Hygiene Fund (SHF)

1. 2023 in a glance

PROVIDED TECHNICAL ASSISTANCE TO KENYA, NIGERIA, SIERRA LEONE AND UGANDA

to help guide governments on market reform decision-making and to facilitate the growth and maturity of sanitation economies.





CONTINUED TO SUPPORT THE REVIEW AND UPDATE OF WATER, SANITATION AND HYGIENE (WASH) ACCOUNTS WITH THE WORLD HEALTH ORGANIZATION (WHO)

in Benin, Burkina Faso, Kenya, Nigeria, Sierra Leone and Uganda to help track funding and financing and support planning and decision-making in the sector.

BEGAN IN EARNEST THE IMPLEMENTATION OF TWO MARKET-BASED SANITATION PROJECTS IN KENYA AND UGANDA

for which SHF committed \$8 million in 2022.



SET THE FOUNDATIONS TO ESTABLISH A PIPELINE FOR CATALYTIC FINANCING,

with investment-ready partnerships being prepared in Kenya, Nigeria and Uganda.



EXPLORED CATALYTIC FINANCING MODELS TO SUPPORT SANITATION ECONOMIES,

including through the development of a sanitation and hygiene accelerator for East Africa.



ENGAGED WITH THE INTERNATIONAL STANDARDS ORGANIZATION (ISO)

to plan collaboration around the establishment of global quality standards for menstrual health products and country adoption.



INCUBATED AN EXCITING NEW MH MARKET INITIATIVE THAT WILL BE LAUNCHED IN 2024,

including by holding dialogues with foundations and other stakeholders to create a pathway for sustainable MHH financing.

CONTINUED ADVOCACY TO RAISE THE PROFILE OF SANITATION, HYGIENE AND MH MARKETS

as investment and development opportunities and led the development of an MHH Funders Group.

2. Delivering sustainable solutions for sanitation, hygiene and menstrual health



There is therefore an imperative for a paradigm shift in how we finance sanitation and hygiene. We have an opportunity for a new paradigm of development finance to create climate-resilient, gender-centric economic growth and development through innovative financing."

 The Honourable Minister Engineer Suleiman H. Adamu, Minister, Nigeria Ministry of Water Resources, 24 March 2023, at the UN 2023 Water Conference

In 2022, 3.4 billion people lacked access to safely managed sanitation services². In Africa alone, 779 million people have no basic sanitation services, and 839 million people are without basic hygiene. Every month, 1.8 billion people menstruate, and over 500 million of them lack access to needed supplies.³

No region is on track to achieve universal access by 2030, and the overall rate of progress will need to increase fivefold to meet the SDG global target of universal access to safely managed sanitation services.⁴ The urgency to respond with better, sustainably financed strategies is escalating. These responses must also consider the potential to improve gender and environmental outcomes as the links between sanitation, climate, health, gender equality and economic well-being emerge stronger than ever.

This was the message that resonated in the hallways of the UN 2023 Water Conference in March 2023 in New York, and that drives SHF's work.

SHF provides an opportunity to change the lagging course of SDG 6.2 and, in doing so, unlock high social impact in health, education, gender equity and women's power, as well as environmental impact and financial returns to investors and countries.

SHF funds and implements new, innovative strategies to address shortfalls in the sanitation and hygiene and MHH sectors. In 2022, SHF worked to build a unique model for incubating national sanitation economies – leveraging both grant financing and engagement with the public and private sectors to shape viable supply chains and markets and forge a comprehensive, sustainable path to achieving universal sanitation for all.



In 2023, SHF hit the ground running, with implementation of market-based sanitation projects in Kenya and Uganda, and the upcoming launch of a third in Nigeria, stress-testing this model. Working closely with national governments, these projects run in parallel to technical assistance in the form of baseline analyses of the specific contextual challenges, investment cases, and market size estimations. SHF also has a growing pipeline of potential investments on the basis of this work. In parallel, SHF spearheaded a unique, market-based approach to achieving menstrual equity at scale in LMICs.

BOX 1:

Leveraging opportunities for catalytic impact in sanitation, hygiene and menstrual health

- Every US \$1 invested in improved sanitation translates into an average global economic return of US \$5.50,⁵ more than double the economic return on water spending (US \$2), or an overall estimated gain of 1.5% of global GDP.
- With sanitation economy approaches, the current cost of sanitation provision can be transformed from US \$200 per person to a net value of US \$10 per person.⁶
- Achieving universal access to basic hygiene and sanitation (alone) can unlock annualized net benefits of US \$45 billion and US \$65 billion, respectively. Achieving universal access to safely managed sanitation might even result in annualized net benefits of US \$86 billion.⁷
- An investment of US \$1 per person per year in hand hygiene could mean that all households in the world's 46 least developed countries would have handwashing facilities by 2030.⁸



- Hand hygiene is a truly 'no-regrets' investment, with estimates showing that for every dollar invested, countries can save US \$15.9
- Improved MH markets emphasize the choice and agency of women and girls and enhance their socioeconomic opportunities, whilst GDP per capita could be 20% higher if gender employment gaps were closed.¹⁰
- 800 million+ menstruators in LMICs are able and willing to pay for reusable menstrual products.¹¹

3. Laying the foundations for thriving sanitation economies and menstrual health markets





As part of its market-based approach, SHF helps build the intelligence necessary for governments to guide their sanitation economies and menstrual health (MH) markets towards greater market maturity and sustainability.

In 2023, SHF commissioned deep dive analyses into the sanitation economies of Kenya, Nigeria, Sierra Leone, and Uganda with the aim of detailing the investment case for sanitation and hygiene as well as the case for MHH public reform in each national context. Detailed analysis determines the current market status, and its potential, along with the specific budgetary, data, standards, regulatory and reform actions needed to create the right enabling environment to stimulate the market and attract additional financing.

Importantly, these analyses serve as a resource for governments to decide steps and potential reforms needed to create a suitable enabling environment for sanitation economies to thrive. They also form the basis of SHF's catalytic financing pipeline - identifying places where SHF can create a sea change of impact, direct and indirect through innovative financing.

For example, in Kenya, analysis found that the supply of sanitation services is highly fragmented, with decentralized county governments sometimes having upwards of 40 Water and Sanitation Providers. As a result, these providers are





usually small scale and face difficulty achieving commercial viability. Providing a standardized sanitation infrastructure managed by fewer service providers could help achieve better economies of scale.

In Uganda, analysis found that there are strong tax incentives for the MH market, and impact investors have begun to provide menstrual products at low cost to encourage commercial adoption. But product quality standards could be improved, especially if they are harmonized with standards in other countries to allow for import from multinational companies, for export regionally, and for greater consumer confidence. Uganda thus has an opportunity to coordinate with the International Standards Organization (ISO), which has tasked a technical committee with developing global standards for a variety of menstrual products by the end of 2025, to ensure that resulting standards reflect their national and regional needs. Uganda also has an opportunity to increase regional standards on reusable menstrual pads and other reusable products, and generally to improve enforcement of standards across the board to prevent sub-standard products entering the market.

Access to household sanitation services in Uganda lags the African average of 35%, at only 20% in 2020. But both consumer demand and government commitment to changing this is growing. SHF commissioned analysis estimates that the country's sanitation economy, valued at USD \$1.7 billion today, could be worth as much as \$2.7 billion by 2030 if opportunities in toilet, circular and smart sanitation economies are taken.

In Nigeria, there is a National Task Group on Sanitation' (NTGS) that coordinates sanitation and hygiene initiatives, and a public health campaign was launched in 2018 called 'Clean Nigeria: Use the Toilet' to raise public awareness of the health impact of poor sanitation and hygiene.¹² With sanitation and hygiene often not seen as a major priority, there is a recognition that next steps must be coupled with measures to address coordination issues between federal, state, and local governments to drive progress. Sierra Leone has attempted a significant transformation of its WASH sector for the last 10-15 years, but the sector still faces gaps in implementation mandates, capacity to deliver these mandates, and regulatory oversight.

There is an opportunity in both these countries to build the capacity of local implementers, including by clarifying their roles granting them greater autonomy. In Sierra Leone, there is also a need for stronger regulation to oversee sanitation measures.

SHF has also been collaborating with WHO to review and update WASH accounts using the WHO's Tracking Financing to WASH (TrackFin) methodology,¹³ which helps give governments a clear picture of funding and financing flows to the sector. Having information on these "WASH accounts" can enable better benchmarking, planning and decision making, and can also be a tool to attract new investment. The idea is that if governments understand what they are spending and on what, they can better identify their needs and fill gaps. This work was carried out in Benin, Burkina Faso, Kenya, Nigeria, Sierra Leone and Uganda, beginning in 2022. An SHF grant for the work complemented WHO's





technical and financial support to over 20 countries on WASH accounts globally and enabled the WHO to provide financial and technical assistance to the six target countries.

The work involved (1) tailored technical assistance to each country, based on the national context and progress, working through a dedicated focal point from the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) team at WH0¹⁴ and (2) the development of materials packages including detailed step-by-step Implementation Guides, training materials, templates, and presentations, and Wash Accounts Production Tool exercises in three languages (English, French and Spanish). This led to two cohorts of African countries building WASH accounts, one francophone and one anglophone. In addition to country-specific technical assistance, WH0 was able to pull in global and regional partners to raise the profile of the importance of WASH accounting to relevant technical experts and stakeholders.

In parallel to this critical intelligence building, SHF developed in coordination with local partners specific projects aimed at accelerating market-based sanitation in two countries (Kenya and Uganda) in 2023.

BOX 2: The Sanitation Value Chain

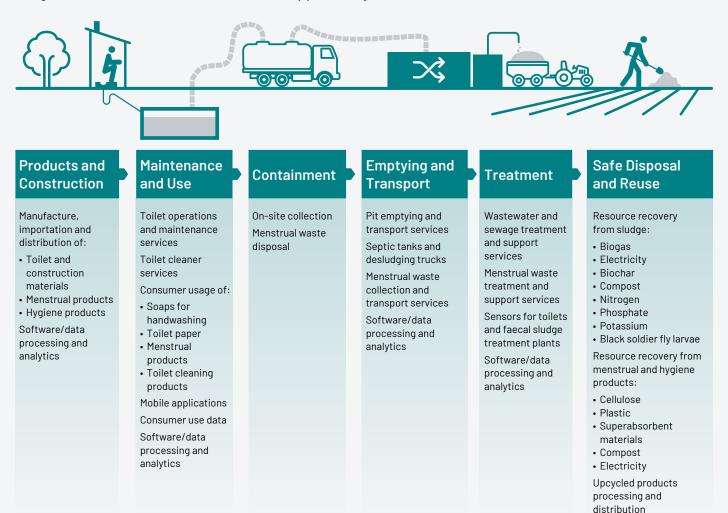
Creating a **mature sanitation economy is about more than toilets**. A **sustainable system has to be full circle**: building a latrine without emptying services will render it useless when it becomes full, for example. Without proper wastewater disposal and treatment, there can be health as well as environmental issues. There are also missed opportunities for

resource recovery, and as the world struggles with a changing

climate these might become increasingly important.



When **SHF invests**, we aim to address not just one aspect of the sanitation ecosystem, but rather to spark a functioning, **interactive economy**. This means working with national and local governments, the private sector, investors and financiers, civil society and other development stakeholders to improve the enabling environment and entrepreneurial ecosystem and thus, pipeline potential. **The aim is that the sanitation economy becomes a self-sustaining market accessible and affordable to all.** Importantly, at every step along this value chain there is economic opportunity.



4. From missing markets to development opportunity: The power of catalytic financing There is evidence for a massive potential market in latrine construction, collection, transport and reuse/ recovery in Low and Middle-Income Countries (LMICs). With 3.4 billion people globally lacking access to safe sanitation services, this is a growth market (see Box 4: The Sanitation Value Chain). For example, the Kenyan toilet economy has the potential to grow from an estimated value of US\$ 1.5 billion in 2022 to US\$ 2.3 billion once universal access has been achieved.

There is also evidence that MH markets have powerful growth potential. Analysis suggests that people who menstruate in low- resource settings are willing to pay for menstrual products, and even prioritise them over other essential goods.¹⁵ As women (many of whom are menstruators) gain economic power, the demand for products that meet their needs will only grow. For more on this, see chapter 6.

SHF's transformative approach addresses critical blockages in achieving universal access to sanitation and hygiene through the shaping of sustainable sanitation economies, and to address menstrual health by catalyzing the MH market. These activities can include: addressing lack of market information, high buyer and supplier risks, transaction costs, and/or insufficient access to finance.

Besides working with governmental stakeholders to support the development of key public sector reforms to improve the enabling environment and regulatory framework, SHF works with subnational actors and utilities to improve capacity and conditions for local sanitation investment planning and infrastructure project financing.

At the same time, SHF focuses on improving investment readiness of early stage enterprises and testing new business model approaches to reach low income consumers through tailored technical assistance and catalytic financing. Moreover, SHF aims to incentivize local currency financing for sanitation, hygiene and menstrual health purposes by partnering with local financial institutions in priority countries, in particular national development banks with onlending channels to commercial banks, microfinance institutions and other financial intermediaries. In addition, SHF explores opportunities for partnering with blended impact investment funds/facilities to incentivise integrating a sanitation, hygiene and/ or MHH lens.







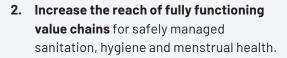


SHF's catalytic financing approach will:









3. Increase access to products and services for safely managed sanitation, hygiene and menstrual health







SHF works with governments and local authorities to assist the process of:

- **Market shaping:** Pinpointing and/or formulating regulations, policies and trade standards that influence the behaviors of market participants. Government interventions such as taxation, subsidies and trade policies can have a significant impact on market dynamics, shaping the structure and conduct of businesses within the marketplace.
- **Market building**: Exploring the factors that create conducive conditions for economic activity to happen, including global and local analysis, development and national financing data; and adoption of global standards and guidance. By creating an environment conducive to business growth and investment, governments can help expand markets and create new opportunities for businesses.

The long-term goal is that thriving sanitation and MH markets are an active part of meeting SDG 6.2. SHF applies a gender and climate lens across all of its work.



BOX 3:

Championing women's leadership for sanitation, hygiene and menstrual health

SHF places high importance on the centrality of women to sanitation, hygiene and MHH market development.

Currently, women and girls bear the brunt of inadequate sanitation and hygiene.¹⁶ Globally more than half a billion people still share sanitation facilities with other households, compromising the privacy, dignity, and safety of women and girls. **Women and girls are more likely than men and boys to feel unsafe going to outside latrines and open defecation fields at night, facing fear of gender-based violence and other safety risks.** At the same time, women and girls are less likely to influence the design and delivery of sanitation services to ensure that they respond to their specific needs.

From menarche to menopause, periods and period poverty can be a recurring nightmare due to harmful gender norms, the silence around menstruation, period-related myths, discomfort, psychological stress, shame, a lack of toilet facilities and unaffordable and unavailable quality products of choice.¹⁷ For example, a meta-analysis of the status of menstrual hygiene among adolescent girls in India, found that a quarter of the girls did not attend school during their period because of the lack of adequate toilets.¹⁸ A 2023 report by Hystra, supported by the Bill and Melinda Gates Foundation (BMGF), found that only 39%



of the 1.8 billion people who menstruate every month have access to products designed for menstrual hygiene.¹⁹

There is an important opportunity here.

SHF-commissioned analysis in 2023 found improved access to menstrual products could increase monthly salary and savings for women.²⁰ Africa also has the highest proportion of women entrepreneurs in the world, with more than a quarter of all businesses either started or run by women.²¹ Gender-smart investments in sanitation, hygiene and menstrual health will help to shift the status-quo from one of personal burden to social and economic opportunities for women, which benefits all of society.





Sanitation is a human right; waste water is a resource; we have to speak up on the 'brown' side of water because this is about dignity.
Public financing will not be enough so we need to leverage private money with public funds.
And we need political will, partners and most of all, women and girls to stand up. With our feminist foreign policy, we want to be brave and that includes talking about menstrual health."

 Nathalie Olijslager, Program Director, UN 2023 Water Conference, Ministry of Foreign Affairs, the Netherlands, 24 March 2023 at the UN 2023 Water Conference

BOX 4: Sustainable sanitation, MHH, and climate change

Poorly managed human excreta, wastewater and solid waste have major environmental consequences; emitting high amounts of methane, polluting human settlements, soil, groundwater, and surface water such as lakes, rivers, and oceans. It is estimated, for example, that sanitation in Kampala, Uganda produces 189 thousand tonnes of CO₂ per year, which may represent more than half of the total city-level emissions.²²

Menstrual products can also have a detrimental impact ranging from the impact of production methods including gas emissions, the volume of single-use waste and plastics in disposable products that end up in landfill and the presence of sewage debris. Disposable pads are estimated to take 500-800 years to breakdown, and materials such as plastic are never truly biodegradable.²³

Climate variability also has an impact on menstrual health, both because climate/ weather events can further limit access to needed products and services and because of the impact of climate change on women's income insecurity and shifting work patterns.²⁴



Climate-smart and environmentally sensitive investments in resilient sanitation and wastewater systems and products both safeguard public health and protect the environment.

SHF promotes innovation to build climate-resilient sanitation and hygiene systems and mitigate the risk of infectious disease associated with inadequate sanitation and hygiene, while promoting a circular sanitation economy that promotes upcycled waste products.

5. Scaling local solutions: Spotlights on implementation

©SHF



Sanitation, toilet, poo, pee are still taboo but the potential of the marketplace is large. The reality is having sanitation is cheaper than not having sanitation. We can create an ecosystem that drives the marketplace and makes financing toilets sexy, which will raise the agenda of sanitation, hygiene and menstrual health nationally and globally."

Jack Sim, Founder of World Toilet Day and World Toilet Organization, 24 March 2023, at the UN 2023 Water Conference

At SHF we are committed to accelerating access to sanitation and hygiene by attracting global capital along with domestic funding and local capital market development in partner countries where access to capital has been a challenge. In 2022, SHF committed \$8 million to begin rolling out sanitation value chain initiatives in collaboration with the governments of Kenya and Uganda. In 2023, the on-the-ground work began in earnest.

In particular, we build on the capability, evidence and partnerships needed to leverage catalytic financing and investment preparedness opportunities so that financial flows are mobilized to enable entrepreneurs MSMEs to meet local demand for products and services. We use both the CWIS approach (see Box 5: Citywide Inclusive Sanitation), as well as off-grid services that do not connect to centralised sewer or electrical systems. SHF believes that off-grid or on-site solutions, incorporating new technologies, can be viable long-term solutions that create local jobs and protect the environment and importantly, provide access to communities for whom sewered connections remain persistently elusive. They can include latrines, container-based sanitation, toilets connected to septic tanks and treatment facilities (see Box 2: The Sanitation Value Chain).

Highlights from 2023 include:



Scoping the MSME landscape, and holding dialogues with over 40 sanitation and MHH businesses to understand barriers to growth and sustainability, focusing on Kenya, Nigeria and Uganda



Dialoguing with a range of development and commercial financing institutions and development partners in East Africa to determine pathways for leverage



Charting out partnership options with the national development bank in Nigeria, set up to address the major financing challenges facing MSMEs in Nigeria

As our catalytic financing work takes shape in 2024, the projects outlined above will provide important learnings and building blocks to guide our approach.





Kenyans lack access to basic sanitation resources

75%

lack access to handwashing facilities in their homes

2022 SHF began a 2.5-year partnership cofinanced by the government of Kenya

\$3 mi committed to support implementation

Spotlight on implementation: Kenya

In Kenya, out of a total population of 47.5 million people, nearly 70% (33 million people) are estimated to lack access to basic sanitation resources ²⁵ and 75% lack access to hand-washing facilities in their homes.²⁶ Access is particularly challenging in the country's densely populated cities, where informal settlements with limited infrastructure have cropped up due to rapid urbanisation.²⁷ In 2022, SHF committed to begin a 2.5 year partnership, co-financed by the government of Kenya. The Kenya Market Based Sanitation (KMBS) partnership is being implemented across five cities: Nairobi, Kisumu, Nakuru, Malindi, and Eldoret. SHF committed to invest \$3 million in direct project implementation, and has also contributed via technical assistance (see chapter 3, above). The overarching goal of the project is to build a holistic and long-term sustainable sanitation economy by engaging with critical partners across several different sectors in a CWIS approach (see Box 5: Citywide Inclusive Sanitation).

Innovative financing is a key part of the SHF approach; comprehensive sanitation systems are often prohibitively expensive for one actor to implement; therefore partnership building is a critical piece of implementation. Important partners in Kenya – such as water utility companies, the Ministry of Water, Sanitation and Irrigation, departments of health and city and municipal boards – have now been engaged to begin CWIS programming in Kisumu and Nakuru, and will soon follow in other cities. We have also initiated engagements with the Nairobi City County Government (NCCG) through the Water Technical Working Group (TWG), which is exploring the possibility of including sanitation in its mandate. Long-term planning discussions are also underway with actors along the sanitation supply chain, including septic tank workers and private sanitation actors. Work has also begun to select implementing partners for a new programme on menstrual health management; and into a pilot for a mobile application, Sanitracker, that helps connect users to Faecal Sludge Treatment Plants (FSTPs).



The idea of using innovation to address sanitation, hygiene and menstrual health challenges is endless. But we need to remember to pay attention to off-grid solutions for the last mile and to bring dignity to those most in need."

 Jingdond Hua, Vice-Chair of the International Sustainability Standards Board (ISSB) and SHF Board Member, 24 March 2023 at the UN 2023 Water Conference

BOX 5: Citywide Inclusive Sanitation

Citywide Inclusive Sanitation (CWIS) is an evolving concept that seeks to address sanitation issues as embedded within an overall urban development plan. As populations grow globally, more and more people are moving into cities. But traditional means of sewage management - often via centralized wastewater treatment systems - are often not fit-for-purpose in rapidly urbanising environments, especially when there are informal settlements that are difficult and or costly to include in existing sewage management systems. This means often the "last mile" - the poorest and most vulnerable communities - are left behind. The sanitation value chain for onsite sanitation has major challenges, which include, for example, the lack of water service providers' capacity to contract the private sector, insufficient demand and affordability of services, lack of public sanitation delegation framework, and lack of public sanitation funding, which then results in low amount of bankable projects and private sector sustainability and financing challenges.

CWIS aims to take a comprehensive approach that (1) recognizes the human right to sanitation services, regardless of socioeconomic status; (2) aims to deliver a holistic approach to managing the entire sanitation service chain (from immediate



waste disposal, to transport, to treatment); (3) partners with a variety of actors, including both government as well as the private sector, and recognising that sanitation touches on several aspects of urban development such as health, education and environmental management; and (4) acknowledges the economic potential provided by the sanitation economy as both a means to create thriving cities as provide employment. While initiatives by major organizations in the sanitation sector, such as the World Bank, USAID, and BMGF have helped channel funding to CWIS, SHF believes much more is needed.

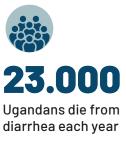


Seventy-five percent of Uganda's disease burden is preventable but most importantly, 60 percent of the disease burden is sanitation and hygiene related, meaning that investing in sanitation and hygiene would trigger a reduction in the overall disease burden of Uganda."

Ms Margaret Muhanga, Minister of State for Primary Health Care, at the 7th Africa Sanitation Conference in Swakopmund, Namibia, November 2023.



Spotlight on implementation: Uganda



1 in **4** girls

of 12-18 drop out school when they begin menstruation

2023

SHF began a 2.5-year partnership with the Ugandan Ministries of Health, Water and the Environment



In Uganda, an estimated 60% of the overall disease burden is linked to poor access to sanitation and hygiene.²⁸ Each year, 23,000 Ugandans die from diarrhea and 90% of the deaths are directly attributable to inadequate water, poor sanitation, and unhygienic practices.²⁹ The economic impact of poor sanitation and hygiene practices is high with an annual cost equivalent to US\$177 million or US\$5.5 per person per year.³⁰ Over the last 10 years, the Uganda Sanitation Fund (USF) has been working to create a greater demand for sanitation services and products, and to ensure their equitable distribution. MHH was not considered an issue until 2012, following a study that established that menstruation directly affects girls' participation, retention and performance in school. This study found that on average, girls miss between four to five days of classes every month due to menstruation. The study also found that around 23% (1 in 4) of adolescent girls in the age group of 12-18 drop out of school when they begin menstruation.³¹

In 2023, SHF began implementing a 2.5-year partnership with the Ugandan Ministries of Health, Water and the Environment. Accelerating Access to Improved Sanitation and Hygiene Services using Market-Based Approaches in Uganda is being deployed in seven districts and four urban centers in Uganda. It will scale-up access to sanitation services in homes, in schools, and in healthcare facilities, which is critical. A baseline study completed in 2023 as part of the project found access to basic sanitation services in the target areas varies from approximately 15-30%. Schools accounting for 472,395 students in these regions reported latrines being abandoned when filled, or emptied in dug pits. There are challenges at healthcare facilities as well; the 175 public healthcare facilities surveyed lacked ideal conditions for access to clean water (ideal conditions being that a regularly treated and tested water supply is piped into the building and always available). SHF has committed \$5 million to support implementation of this project, and is expecting to see results beginning in 2024.

6. The Next Catalytic Investment Opportunity: Transforming the MH Market



Women's and girls' inability to access sanitation and manage their menstrual hygiene and its associated stigma prevents them from participating equally in society. By empowering women through innovative financing with a gender lens, advancing women's leadership, and creating an enabling environment, we are contributing to breaking the cycle of gender inequalities and co-creating a new healthy world that works for everyone and leaves no one behind."

- Anita Bhatia, Former Assistant Secretary-General and Deputy Executive Director UN Women and SHF Board member.

Every month, 1.8 billion people worldwide menstruate; yet 1 in 4 amongst them struggles to manage their menstruation safely, and with dignity. This currently underserved market provides the opportunity for wins in gender inclusivity and economic development, as well as financial opportunity for enterprises that can provide needed products and services.

With guidance from our board, SHF has developed an approach that focuses on investing in menstrual equity – that is, equitable access to the products, services and information needed to manage menstruation – offering an opportunity for gender focussed investments with lasting and tangible impacts across society, including on the environment. This ranges from social returns for women and girls in education, health and workforce participation to financial returns through the MH market. With the total population of menstruating women in Africa expected to grow by 31% in 2030, we are at the precipice of an incredible investment opportunity.

There are currently few MSMEs that have responded to the need for affordable, accessible menstrual

products. But the market is there. SHF believes that with our catalytic financing approach (see chapter 3 above), this market can be jump-started to provide gender-smart economic opportunity and public health improvements.

Analysis commissioned by SHF and published in 2023 offered promising insights on the potential impact of investment in MHH on women's education, health and economic well-being. Improved menstrual health can reduce disease, reduce healthcare costs, increase wellbeing at school and work, and contribute to household savings, the analyses found.³² Investing in MHH now can also lay the groundwork for a more sustainable future: markets with poor saturation of any menstrual products are particularly ripe for the introduction of renewables. Estimates released in 2023 say that 800 million people in LMICs - an enormous underserved market - would be willing to pay for reusable menstrual products. If access to these products becomes more commonplace, economies of scale can bring down prices and be accessible to even more people.

In 2023, SHF created a roadmap towards unlocking the potential of this untapped market by 2030. The current focus is collaboration with the International Standards Organization, which in 2022 launched a technical committee on menstrual products,³³ and on developing investment and financing cases for the MH market (see chapter 3, technical assistance, above).

SHF has also been advocating for a coherent, unified approach towards the financing of MHH initiatives. Previously, funding for MHH has been ad hoc, limited, and never part of an overarching agenda. In 2023, SHF organized two roundtables, in June and in November, bringing together donors, funders, philanthropic partners and other stakeholders to learn from each other, and move from ad hoc, individual financing to better linked, holistic programming. The intent in 2024 is to continue building a structured, aligned investment stream for the MH market, including both grant financing and market-based approaches.

We adopt a phased approach to target the most	
pressing barriers and unlock market growth	

	2024 2026 Market Readiness	2027 2028 Market Building	2029 2030 Market Acceleration
	Assess market barriers and create conditions to develop the MH market	Address market barriers, enable MH market development and investment readiness	Scale the MH market and catalyze financing into investable MH opportunities
Product Standards	Support global standards development (ISO)	Enable ISO standards adoption at the national level	Support harmonization of global standards across regions/countries
Regulation	 Map regulatory barriers and support local partners' advocacy efforts 	Support national reform efforts	
Viable Models	 Analyze MH market and conditions in select countries Build MH-focused incubator 	 Provide TA to governments to improve MH market maturity Replicate the MH incubator 	 Develop pipeline of investable MH opportunities Help MH businesses scale
S Financing	 Develop investment/financing case and financing strategies 	Engage investors / financiers to build interest in MH market	Catalyze financing into investment opportunities
Other	 Build evidence base on MHH impact Support demand generation 	 Develop MHH impact indicators Support partners to reduce customer acquisition costs 	Showcase results of MH investments

7. Strategic Stewardship

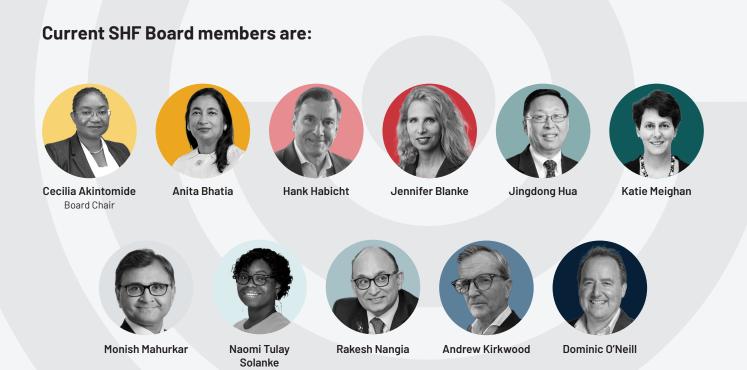
SHF is a part of the United Nations Office for Project Services (UNOPS). The SHF Governance Framework management, assurance, and compliance - is based on the UN/UNOPS rules and regulations and on strategic high-level Board and Committees.

Since its inception, SHF has passed through several internal and external audit and partner assessment processes with excellent results, reinforcing the confidence of donors to our system and business model. The most recent completed assessment on behalf of one of SHF's donors concluded that "the control of internal project processes is excellent", also affirming "that the control and governance processes put in place by the SHF should serve as a model."

SHF Board

SHF's Board comprises exceptional leaders and experts in development financing, impact investing, entrepreneurship, innovation and accountability including former vice-presidents of the World Bank, and the African Development Bank; and senior leaders of the International Finance Corporation (IFC), and the World Economic Forum.³⁴

The SHF Board meets twice a year and provides strategic approvals, leadership, guidance, and advice, including through two committees on Finance, Risk and Audit, and on Impact and Investment. All board members work with the SHF on a voluntary and honorary basis and are subject to UNOPS ethics and compliance.



These include new members Katherine (Katie) Meighan, Associate Vice-President and General Counsel of IFAD and Monish Mahurkar, Head of Climate Transition at ARGA Investment Management LP, a global value management firm, who joined the SHF Board in 2023. The year also marked the last year of service of inaugural board member Frannie Léautier whose guidance to SHF has been monumental in our early years.

Collective Impact for Our Collective Future: Nurturing Strong Partnerships

As a United Nations Global Fund, SHF is uniquely positioned to bring together a range of public and private partners to accelerate progress for sanitation, hygiene and menstrual health. Country-owned is a key pillar of SHF's model and we are pleased to have built strong partnerships with governments in the countries we worked in 2023 to deliver strong results. This includes our co-financed projects in Kenya and Uganda (see spotlights on implementation, chapter 5), as well as our direct technical assistance to governments, including in collaboration with the WHO (see chapter 3). We have also been a leader in pulling together investors in MHH and working to build a coherent, targeted financing strategy to intervene in this sector through a series of roundtable discussions (see chapter 6).

SHF has been able to develop its unique approach to sanitation, hygiene and menstrual health thanks to the support and visionary leadership of its two anchor donors: the Netherlands and Switzerland. In March, SHF welcomed a USD 18 million contribution³⁵ from the Swiss Agency for Development and Cooperation (SDC), an endorsement of SHF's model to tackle the global sanitation, hygiene and menstrual health crisis. The contribution from Switzerland will be allocated toward SHF activities in Nigeria, Kenya, Uganda, Benin, and Sierra Leone. It adds to USD 30 million in financing contributed by the government of the Netherlands in 2022 for use over four years.



Changing the narrative around sanitation, hygiene and menstrual health

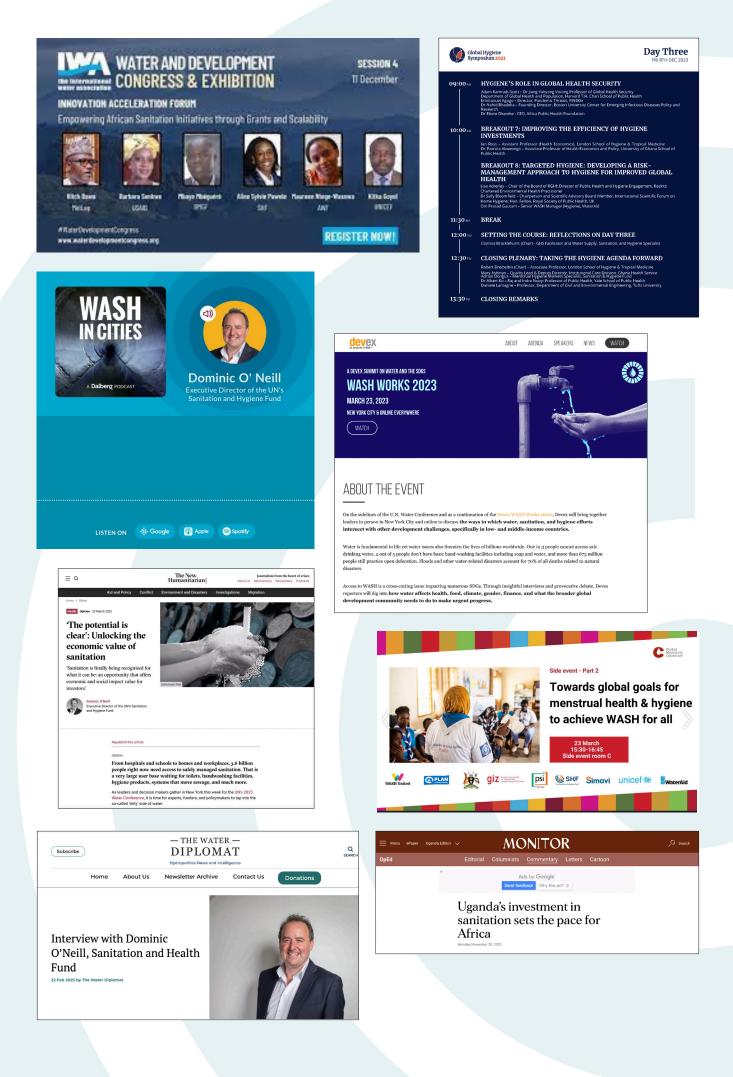
A major part of SHF's ambition is to bring attention to the underfunded and overlooked potential of sanitation economies and MH markets. SHF strives to highlight the human, social and economic returns of investing in sanitation, hygiene and MHH and to turn an overlooked issue into an investment opportunity. In 2023, SHF has contributed to raise the profile of these issues through successful media and partner outreach, including in publications such as Devex, the New Humanitarian, Global Water Intelligence and African Business, and through strategic participation in key global events. The events below are estimated to have brought together a global network of experts, having been collectively attended by over 31,000 water, sanitation, and/or MHH professionals.

In 2023, SHF has contributed to position sanitation, hygiene and menstrual health centrally in the global agenda. Some highlights of our external engagements include:

- March 2023, when SHF along with the Federal Republic of Nigeria and the World Toilet Organization hosted a side event to discuss the sanitation economy at the first-in-a-generation UN Water Conference in New York and was a co-host to a groundbreaking session on menstrual health.
- July 2023, where SHF worked with partners to bring menstrual health to the top of the feminist agenda at Women Deliver and August 2023 at World Water Week with various sector partners.
- November 2023, when SHF attended the 7th AfricaSAN Conference in Swakopmund, Namibia, a flagship meeting for sanitation and hygiene in Africa. On the occasion of this event, SHF and the Ministry of Health of Uganda held a high-level meeting on harnessing partnerships to accelerate sanitation and hygiene management.
- December 2023, when SHF was invited to speak at a plenary session at the Global Hygiene Symposium, organized by Chatham House and the Reckitt Global Hygiene Institute (RGHI) in Singapore on our plans to drive change in MHH.
- Also in December 2023 at the Sanitation Innovation Acceleration Forum held alongside the International Water Association Water and Development Congress in Kigali, Rwanda, SHF and partners from Bill & Melinda Gates Foundation, UNICEF, African Development Bank Group, and WASHFIN held an event on empowering African sanitation initiatives through grants and scalability.

Simultaneously showcasing the importance of sanitation, hygiene and menstrual health as issues of economic development and human dignity as well as investment opportunities is important to attracting more financing and ultimately achieving the targets set out in the Sustainable Development Goals. We look forward to scaling up this momentum in 2024.





8. Forward Look

Ninter ba

In 2023, SHF made important progress towards realizing its vision of universal access to sanitation, hygiene and menstrual health in LMICs through the activation of sanitation economies and targeted work on the MH market. But our work has just begun. The end of 2023 saw SHF preparing to present its groundbreaking approach to the MH market to global leaders meeting in Davos,³⁶ Switzerland in early 2024. This is the first step in a planned 2024 launch of a new initiative that will focus exclusively on innovative financing approaches to support women and girls in accessing what they need to safely manage menstruation.

SHF is also working to bring together a new mechanism that will mobilize and pool resources towards catalytic financing. This will include deep collaboration between SHF and the UN Capital Development Fund (UNCDF) and other partners within the UN system.

In the two years since its founding, SHF has taken significant strides in becoming a leader in new thinking on sanitation and hygiene, reframing it as not only an issue of human health and dignity but as an exciting, dynamic potential market ripe for innovation and investment. We will build on this work in 2024 with a stock-taking exercise and the next phase of our strategy aimed to solidify this thinking and cement SHF's approach as a powerful new model to meet sanitation-related SDGs and to set up thriving, self-sustaining sanitation economies.

With the Summit of the Future in sight and much of the global community focusing on re-thinking financing for development models, SHF proposes a concrete example of how the UN system can harness innovative financing to move the needle on the Agenda 2030 and ensure that no one is left behind.

In 2024, SHF will continue leveraging and aligning with the global agenda to position sanitation, hygiene and menstrual health centrally, while also contributing to progress on gender equality and creating a stronger link between sustainable sanitation and climate change.

For too long, the staggering statistics on global sanitation, hygiene and menstrual health have become missed opportunities for growth, equality and prosperity. This needs to change. At SHF, we are committed to ensure these are shaped into the investment opportunities they can be, for people, economies and the planet.









Endnotes

- By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- 2 WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP)(2023). Available at: <u>https://</u> www.unwater.org/publications/who/unicef-joint-monitoring-program-update-report-2023
- 3 World Bank (2022). Menstrual Health and Hygiene. Brief. Available at: <u>https://www.worldbank.org/en/topic/water/</u> brief/menstrual-health-and-hygiene
- 4 Progress on household drinking water, sanitation and hygiene 2000-2022: gender pullout <u>https://washdata.org/reports/</u> jmp-2023-wash-households-gender-pullout-launch
- 5 United Nations (2024). Water Improved sanitation and economic benefits. Available at: https://www.un.org/en/ global-issues/water
- 6 TBC (2019). Scaling up the sanitation economy 2020-2025. Available at: https://www.toiletboard.org/media/52-Scaling_the_Sanitation_Economy.pdf
- 7 WaterAid (2021). Mission-critical: Invest in water, sanitation and hygiene for a healthy and green economic recovery. Available at: <u>https://washmatters.wateraid.org/sites/g/files/ jkxoof256/files/mission-critical-executive-summary.pdf</u>
- 8 World Health Organization (2021). State of The World's Hand Hygiene report. Available at: https://www.who.int/news/ item/15-10-2021-investing-1dollar-per-person-per-year-inhand-hygiene-could-save-hundreds-of-thousands-of-lives
- 9 ibid.
- 10 Dalberg (2023). Menstrual Health and Hygiene: A cross-cutting impact opportunity. Available at: <u>https://dalberg.com/ our-ideas/menstrual-health-and-hygiene-a-cross-cutting-impact-opportunity/</u>
- 11 Hystra: Hybrid Strategies Consulting (2023). A business case for selling reusable menstrual health products in the Global South. Available at: <u>https://www.hystra.com/our-insights/</u> <u>reusable-pads</u>
- 12 WaterAid (2018). Clean Nigeria Campaign. Available at: <u>https://www.wateraid.org/ng/get-involved/clean-nigeria-campaign</u>

- 13 World Health Organization (2020). Water Sanitation and Health. WASH Accounts, TrackFin methodology and guidance. Available at: <u>https://www.who.int/teams/environment-cli-</u> <u>mate-change-and-health/water-sanitation-and-health/</u> <u>monitoring-and-evidence/wash-systems-monitoring/</u> <u>un-water-global-analysis-and-assessment-of-sanita-</u> <u>tion-and-drinking-water/wash-accounts</u>
- 14 For more information on the WHO's results from WASH accounting, see the GLAAS data portal here: <u>https://glaas.who.int/</u>
- 15 Berthault, L et al (2023). Scaling up Access to Menstrual Health in the Global South: Improving product quality and access to reusable options. A report by Hystra, supported by the Bill and Melinda Gates Foundation. Available at: <u>https://www.hystra. com/our-insights/a2mh</u>
- 16 UNICEF and WHO (2023). Progress on Household Drinking Water, Sanitation and Hygiene 2000-2022: Special Focus on Gender. Available at: <u>https://cdn.who.int/media/ docs/default-source/wash-documents/jmp-2023_layout_v3launch_5july_low-reswhowebsite.pdf</u>
- 17 ibid.
- 18 van Eijk, AM et al (2016). Menstrual hygiene management among adolescent girls in India: a systematic review and meta-analysis. BMJ Open. Available at: <u>https://pubmed.ncbi.</u> <u>nlm.nih.gov/26936906/</u>
- 19 Hystra: Hybrid Strategies Consulting (2023). Scaling Up Access to Menstrual Health in the Global South: Improving product quality and access to reusable options. Available at: https://www.hystra.com/our-insights/a2mh
- 20 SHF (2023). Investment in Menstrual Health and Hygiene offers promising potential for impact. Available at: <u>https://www. shfund.org/media/investment-menstrual-health-and-hygiene-offers-promising-potential-impact</u>
- 21 https://www.gemconsortium.org/report/ gem-20162017-womens-entrepreneurship-report
- 22 Nature Portfolio: Communications Earth & Environment (2022) Whole-system analysis reveals high greenhouse gas emissions from citywide sanitation in Kampala, Uganda. Available at: https://www.researchgate.net/publication/359560610_ Whole-system_analysis_reveals_high_greenhouse_gas_ emissions_from_citywide_sanitation_in_Kampala_Uganda

- 23 Peberdy E, Jones A, Green D (2019). A Study into Public Awareness of the Environmental Impact of Menstrual Products and Product Choice. Sustainability. 2019;11(2):473. Available at: https://www.mdpi.com/2071-1050/11/2/473.
- 24 Khorsand, P et al (2023) A planetary health perspective on menstruation: menstrual equity and climate action, The Lancet Planetary Health. Available at: <u>https://www. thelancet.com/journals/lanplh/article/PIIS2542-5196(23)00081-5/fulltext</u>
- 25 USAID (2023). Kenya: Water Sanitation and Hygiene (WASH). Fact Sheet. Available at: <u>https://www.globalwaters.org/sites/</u> <u>default/files/water_sanitation_and_hygiene_fact_sheet_.pdf</u>
- 26 UNICEF. Water, Sanitation and Hygiene: Improving children's access to water, sanitation and hygiene. Available at: <u>https://www.unicef.org/kenya/water-sanitation-and-hygiene</u>
- 27 The World Bank (2020). Providing Sustainable Sanitation and Water services to Low-income Communities in Nairobi. Feature Story. Available at: <u>https://www. worldbank.org/en/news/feature/2020/02/19/ providing-sustainable-sanitation-and-water-services-to-low-income-communities-in-nairobi</u>
- 28 Ministry of Health Uganda (2023). Available at: <u>https://www.health.go.ug/2023/11/13/minister-muhanga-calls-for-invest-ment-in-the-sanitation-economy-for-disease-prevention/</u>
- 29 Water and Sanitation Program, WSP (2012). Economic impacts of poor sanitation in Africa : Uganda. Briefing Note. Available at: https://www.ircwash.org/resources/economic-impacts-poor-sanitation-africa-uganda
- 30 ibid.
- 31 Miiro, G et al (2018). Menstrual health and school absenteeism among adolescent girls in Uganda (MENISCUS): a feasibility study. BMC Women's Health. Available at: <u>https:// bmcwomenshealth.biomedcentral.com/articles/10.1186/</u> s12905-017-0502-z
- 32 SHF (2023). Investment in Menstrual Health and Hygiene offers promising potential for impact. Available at: <u>https://www. shfund.org/media/investment-menstrual-health-and-hygiene-offers-promising-potential-impact</u>

- International Organization for Standardization, ISO (2022).
 Technical Committee ISO/TC 338: Menstrual products.
 Available at: <u>https://www.iso.org/committee/8933440.html</u>
- 34 SHF: Our Board. Available at: <u>https://www.shfund.org/</u> our-leadership/our-board?page=0
- 35 SHF (2023). Switzerland contributes record CHF 16 million to tackle global sanitation, hygiene and menstrual health crisis. News. Available at: <u>https://www.shfund.org/media/</u> switzerland-contributes-record-chf-16-million-tackle-global-sanitation-hygiene-and-menstrual
- 36 SHF (2024). Investment in Menstrual Health, a win-win-win for women, economies and the environment. News. Available at: <u>https://www.shfund.org/media/investment-menstru-</u> al-health-win-win-women-economies-and-environment
- 37 Nature Portfolio: Communications Earth & Environment (2022) Whole-system analysis reveals high greenhouse gas emissions from citywide sanitation in Kampala, Uganda. Available at: https://www.researchgate.net/publication/359560610_ Whole-system_analysis_reveals_high_greenhouse_gas_ emissions_from_citywide_sanitation_in_Kampala_Uganda
- 38 Peberdy E, Jones A, Green D (2019). A Study into Public Awareness of the Environmental Impact of Menstrual Products and Product Choice. Sustainability. 2019;11(2):473. Available at: https://www.mdpi.com/2071-1050/11/2/473.
- 39 Khorsand, P et al (2023) A planetary health perspective on menstruation: menstrual equity and climate action, The Lancet Planetary Health. Available at: <u>https://www. thelancet.com/journals/lanplh/article/PIIS2542-5196(23)00081-5/fulltext</u>



The Sanitation and Hygiene Fund (SHF) is a part of UNOPS.

