



The Sanitation & Hygiene Fund



Annual Report 2022



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For more information:
SHF Website: www.shfund.org

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Message from the Board Chair

The year 2022 began with the cautious optimism of a world ravaged by a pandemic, only to be disrupted as concerns of war, recession and political instability crystallized progressively. And against this worrisome background, the world's most vulnerable continued to be deprived of their access to the most basic human rights and services, including sanitation, hygiene and menstrual health.

We have known for a long time that the global aid framework needs a rethink and now is the moment to action innovations and ideas for this structural shift. With increasing instances of South-South cooperation and pledges in sustainable development by countries previously seen as traditional recipients of aid, we have before us an opportunity to power a dramatic shift in local investment and finance flows, and lift communities, economies and countries to new levels of growth.

This is the model that the Sanitation and Hygiene Fund (SHF) is diligently working toward and we are starting to see the results. Our pre-financing work in six countries in Africa suggests that there is potential to build sanitation economies and menstrual hygiene marketplaces worth more than US\$ 21 billion in these countries alone, and we are excited to move into the next phase of our work where we are using our funding catalytically to incentivize public and private investment and deliver lasting change for communities. Change that lays the foundation for an equitable, inclusive and gender-equal society, and one that conserves natural resources and addresses the risks of climate change.

Being a pioneer often means having to walk alone toward a destination few can see, and we are deeply grateful for the trust and collaboration shown by our partners in-country and our donors as we scale new frontiers for development finance. We are committed to leave no one behind as we do our part to deliver safe and sustainable sanitation, hygiene and menstrual health services for all in need.

Thank you for your support.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Cecilia Akintomide'.

Cecilia Akintomide

Chair,
The Sanitation and Hygiene Fund



Message from the Executive Director

In a world where consensus is increasingly elusive, one thing the global community is in agreement on is the need to do development finance differently. For too long, we have relied on traditional aid models and while some progress has been made, we need impact to be deeper, faster and lasting. This is what drives us at the Sanitation and Hygiene Fund (SHF), the only UN fund of its kind dedicated to tackling the global sanitation, hygiene and menstrual health crisis.

Coming out of the COVID-19 pandemic, it has been evident that sanitation and hygiene infrastructure (and funding) needs a structural reset and the solution lies in building stable sanitation economies. In an economically volatile, rapidly warming global context, investment in sanitation, hygiene, and menstrual hygiene and health products and services can ensure deep, concrete impact for communities and investors, economies and countries.

We have witnessed, in the past year, stories of sanitation entrepreneurs and enterprises that have transformed lives by offering accessible, affordable products and services to families in need. What for some may appear to be a simple toilet pan is the pathway to better health, well-being and livelihoods for many. And that is the kind of catalytic impact we are taking to scale here at SHF, with a particular focus on women and girls and all people who menstruate. Far too many continue to face period poverty and together with our partners in-country and donors, from public and private sectors, we intend to bring intentional support for communities, especially women leaders and entrepreneurs, and gender-inclusive supply chains.

SHF is committed to build an inclusive, equitable, gender-equal society for all, and the foundations of it lie in safe and sustainable access to sanitation, hygiene and menstrual health for those in need. This is our message to those we work with and to the global community who will meet for the first time at the UN 2023 Water Conference in March this year, after nearly 50 years, to discuss water and water-related themes. Let this be a truly watershed moment that breaks the barriers holding universal sanitation, hygiene and menstrual health equity back. The SHF stands ready to do its part, with accountability, results and impact.

Thank you for your partnership.

Sincerely,

Dominic O'Neill

Executive Director,
The Sanitation and Hygiene Fund



List of Acronyms

CWIS	City Wide Inclusive Sanitation
GIIN	Global Impact Investing Network
IFC	International Finance Corporation
IFI	International Finance Institution
DGIS	Directorate-General for International Cooperation
GLAAS	UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water
HR	Human Resources
MDB	Multilateral Development Bank
MHH	Menstrual Health and Hygiene
ODA	Official Development Assistance
SDC	Swiss Agency for Development and Cooperation
SDGs	Sustainable Development Goals
SHF	Sanitation and Hygiene Fund
SME	Small and Medium Sized Enterprises
SRHR	Sexual and Reproductive Health and Rights
TA	Technical Assistance
TBC	Toilet Board Coalition
WASH	Water, Sanitation and Hygiene
WSSCC	Water Supply and Sanitation Collaborative Council

About SHF



©WSSCC

The Sanitation and Hygiene Fund (SHF), operational since July 2021, is uniquely positioned as the only UN fund dedicated to Sustainable Development Goal (SDG) Target 6.2, sanitation and hygiene.

We exist to catalyze investment in off-grid sanitation economies and menstrual hygiene marketplaces. We do this by working in partnership with Low- and Middle-Income Countries (LMICs), development partners, development financing institutions and the private sector to tackle barriers to inclusive growth and accelerate sustainable markets. In line with the UN Common Agenda, we put women and girls - their choice, voice and power - at the center of these activities so that they benefit from better health, education, jobs and a cleaner environment. We work hard to avoid duplication of effort and resources to ensure that we are complementing the work of other multilateral partners.

SHF has a dedicated Board of development and finance experts, providing advice, strategic guidance and oversight. Like the SHF team, our Board members are each champions of women and girl's empowerment and market based approaches for the advancement of sanitation, hygiene and menstrual health.

This is our first annual report.

Dialogue

Our aim is to multiply and accelerate the combined effort of everyone, so that capital flows are far reaching, inclusive and sustainable. In 2022 we tested this thinking, sounded out our big ideas, listened to feedback and refined aspects of our strategy.

Conversations extended to policy and decision makers, advocates, experts, government ministers and officials, and financial actors. We met people who excel at doing things differently, for example, end-to-end impact measurement, capturing social performance data, driving innovation in asset management companies, pioneering inclusive financing and those creating and managing philanthropic investment portfolios. We also identified our niche within the UN family and wider development space, seeking synergy and offering added value to work in women's health, empowerment and entrepreneurship.

Our Donors

We are grateful for the generous support of the Governments of the Netherlands and Switzerland in taking SHF from an idea to a reality.

SHF in 2022 at a Glance

Built a new Fund

Set up SHF governance and Board committees for finance, risk and audit; and impact

Focused our strategy on off-grid sanitation economies and the menstrual hygiene marketplace

Committed to women's empowerment, gender-smart, climate smart criteria

Built a strong results-based monitoring and reporting structure, managing risk effectively

Engaged in pre-financing

Initiated new sanitation and menstrual health and hygiene market estimates for five countries

Provided technical assistance to six countries to build investment readiness and pipeline development

Engaged with sanitation and menstrual hygiene SMEs to understand the barriers to accessing capital for growth

Started to scope potential investable propositions and transactions

Positioned catalytic financing for results

Positioned our Catalytic Financing Framework

Built bridges with development finance, identifying our catalytic role

Supported governments to develop financial tracking for sanitation and hygiene in six countries

Identified grant-based financing instruments to accelerate sanitation economies



US\$ 8 million committed

Kenya US\$3 million, Uganda US\$ 5 million



4+ million lives impacted



2.8 million individuals with improved access to sanitation and hygiene



715,000 individuals with climate resilient sanitation and hygiene



140 sanitation and hygiene businesses supported



4.2 million women and girls with improved MHH information and products



180 schools & **40** health care facilities with improved WASH & MHH access

Note: Expected results from direct funding to Kenya and Uganda only, not including additional results from co-financing.

1. Our Focus



Progress towards the global target of achieving access to adequate and equitable sanitation and hygiene for all and ending open defecation, paying special attention to the needs of women and girls and those in vulnerable situations, by 2030 is lagging behind. This means that:



more than **4 billion people** globally are missing out on the education, gender, health, work and climate benefits that safe sanitation, hygiene and menstrual health bring



500 million menstruators are without the basics to manage their menstrual health and hygiene safely¹

Targets are missed because the available funding falls considerably short of the global need, and in many countries, systems to support the sector are weak - lacking in regulation, reliable investment and capacity to deliver sustainable impact. It is that basic, yet collectively we are not getting these economic, health and social issues right.

Similarly, funding for gender equality is not keeping pace with need, with only 4.6% of bilateral allocable ODA going to programmes where gender equality is the main objective.¹ At the same time, it has been estimated that the potential global market for impact investing is as much as US\$ 269 trillion (the financial assets held by institutions and households)² and that the size of the impact investing market currently stands at US\$ 1.2 trillion in assets under management.³ Channeling just a small proportion of this potential investment to social, environment and economic outcomes, would go a long way towards closing funding gaps.

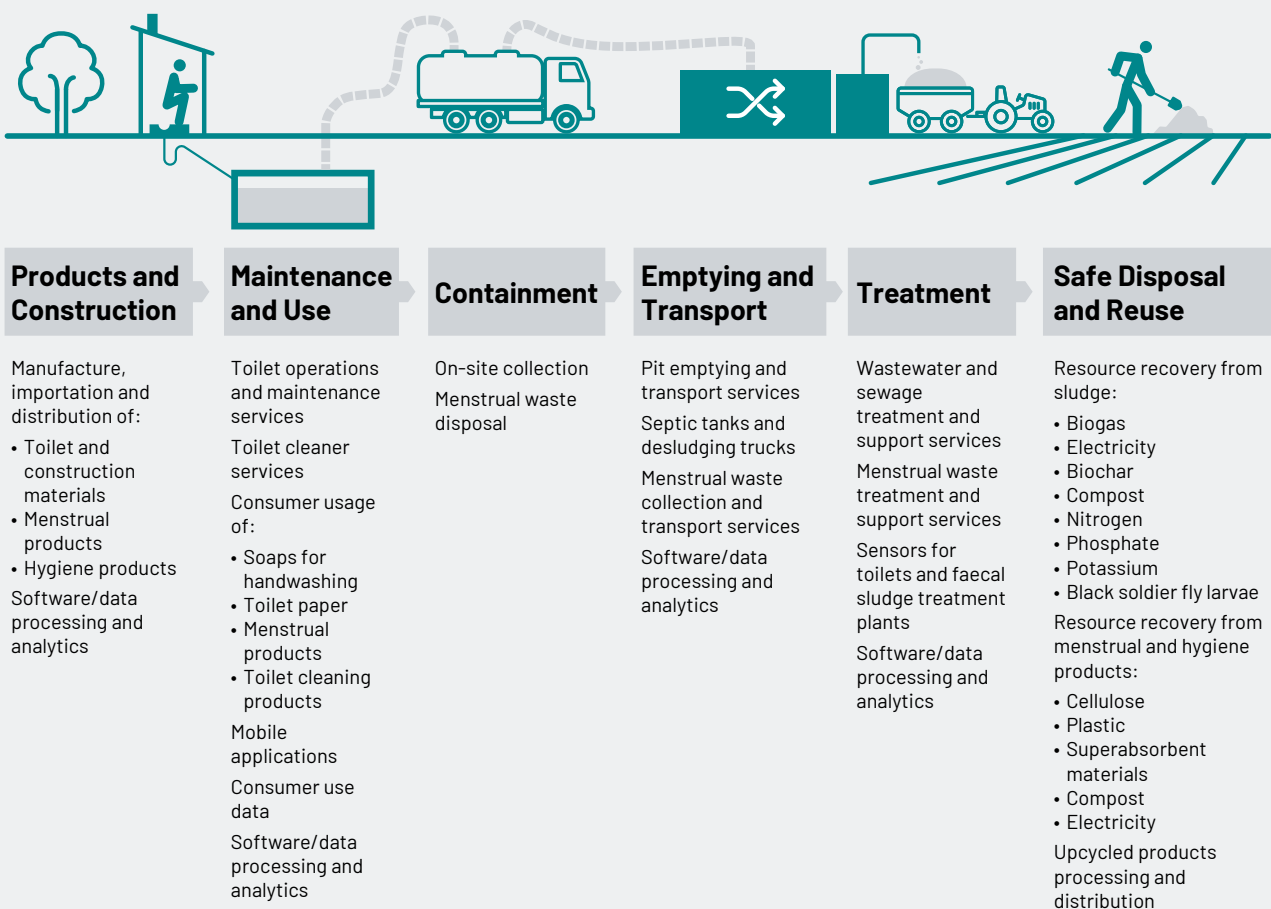
Sanitation, with its potential for growth, is a sound, long-term investment that creates prosperity. For example, estimates of the sanitation economy and menstrual hygiene marketplace potential are US\$ 14.2 billion for Nigeria, US\$ 3.1 billion for Kenya and US\$ 3.4 billion for Uganda.⁴ In addition, in emerging markets, small and medium-sized enterprises (SMEs) create 7 out of 10 formal economy jobs,⁵ and because the sanitation economy and menstrual hygiene marketplace can be leaders in job creation, the scope for employment is significant.



Focus on off-grid, on-site safely managed sanitation solutions

Delivering sewerage sanitation to all communities and households everywhere is simply impractical and vastly expensive. In 2020, more people used on-site sanitation than sewerage connections for the first time.⁶ SHF believes that off-grid and on-site sanitation systems are a viable long-term solution. New technologies and service models are resulting in complementary solutions to traditional sewer-based sanitation, creating local jobs, factoring in the environment and helping to accelerate sustainable, affordable access at a fraction of the cost of large networked systems.

Such solutions include traditional and improved latrines (various kinds of pits), container-based sanitation (CBS), flush toilets connected to septic tanks and various wastewater collection and treatment facilities, such as faecal sludge management technologies. They require hardware investments and installation by skilled sanitation entrepreneurs. They also require periodic and safe emptying, the deliberate removal of wastewater or faecal sludge from a toilet or containment technology for transport, off-site treatment, use or disposal. The collected faecal sludge is a valuable economic resource.⁷



SHF is changing how we respond. A critical step is the building of sustainable connections between available finance and those that need it. The SHF is positioned to complement the work of others in the sanitation, hygiene and menstrual health domain. We do this by focusing on

market-based approaches that create viable jobs, sustain livelihoods and allow the most marginalized to engage in markets on better terms, and strengthen demand for the goods or services they produce.⁸

2. Catalyzing Change



Sanitation economy entrepreneurs in Abomey, Benin. ©James Wicken/SHF

Attracting global capital along with domestic funding and local capital market development is critical for the achievement of the SDGs. Whilst the public sector needs partnerships with the private sector to shape and build sanitation, hygiene and MHH markets, the private sector requires financial returns in addition to social returns to be able to invest. Banks, corporations and institutional investors need assurance that social impact and financial returns can co-exist. Focusing on off-grid sanitation economies and the menstrual hygiene marketplace, with countries at the forefront, SHF aims to act as a catalyst, bridging the gap between social impact and the finance it needs. Success will be transformative.

The Sanitation Economy

The sanitation economy is a business response to the global sanitation and hygiene crisis. It comprises three main elements:



THE TOILET ECONOMY

- where businesses and enterprises provide toilets and infrastructure right for local conditions and preferences, alongside services for operation and maintenance.



THE CIRCULAR SANITATION ECONOMY

- focusing on the whole sanitation chain from the presence of toilet technologies that are environmentally friendly, to the collection of waste and its treatment and transformation into sanitation-derived products, for example fertilizer and fuel.



THE SMART SANITATION ECONOMY

- digitizing sanitation systems to learn about human behaviour and health, including menstrual health.

The Menstrual Hygiene Marketplace

The menstrual hygiene marketplace provides:



MENSTRUAL PRODUCTS

- access to reusable and disposable menstrual materials, as per choice and affordability and gender-responsive facilities and services allowing users to change, clean or dispose of materials safely



CIRCULAR MENSTRUAL HEALTH AND HYGIENE (MHH)

- new and innovative technology including recycling and reuse to reduce the impact on the environment



SMART MHH

- smart supply chains and applications to extend reach

The sanitation economy and menstrual hygiene marketplace are closely interconnected. Women and girls in particular require access to safe toilets, handwashing and hygiene products as well as menstrual products and the broader menstrual hygiene economy to be able to manage their periods safely and with dignity (see Figure 1). For SHF, it is

imperative that the emerging markets are accessible to all, including the marginalized. With our partners, we work to ensure that those most in need receive the additional support they need to equally benefit from improved market products and services.

The Sanitation Economy

The Menstrual Hygiene Marketplace

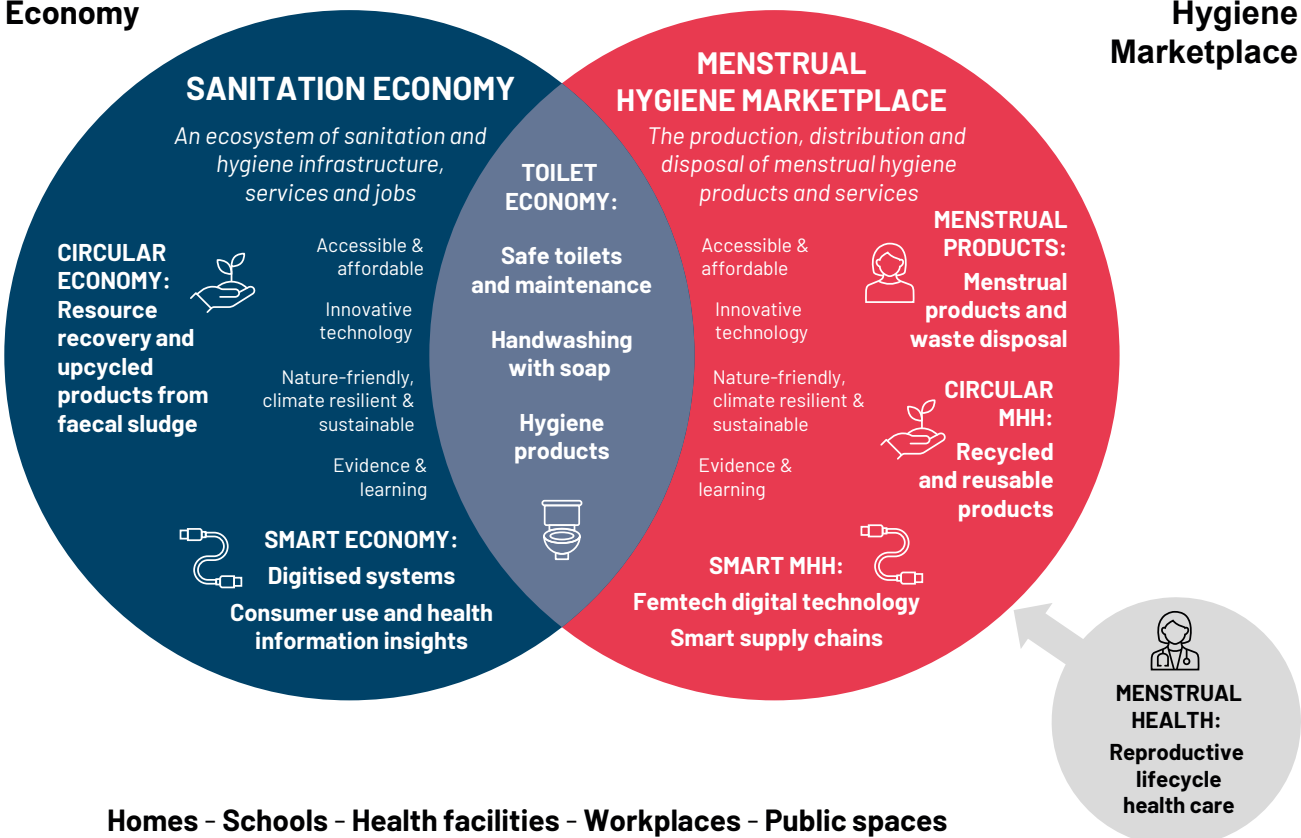


Figure 1. The Sanitation Economy and the Menstrual Hygiene Marketplace

Our Niche in Menstrual Health and Hygiene

Menstruation poses far-reaching challenges. *Period poverty*, which is being unable to afford menstrual health and hygiene products of choice, and in many cases any products, coupled with the financial burden posed by menstrual supplies, has a profoundly negative impact on the lives and freedoms of millions. Menstrual products have a detrimental impact on the environment, ranging from the impact of production methods including associated CO2 emissions to the volume of single-use waste and plastics in disposable products that end up in the environment, landfills and sewage debris. Meanwhile, sanitation workers face the challenges of operating in unregulated conditions.⁹ Furthermore, emerging evidence states that climate factors affect menstrual product use and uptake, suspend menstrual health initiatives, exacerbate water challenges with negative menstrual health outcomes, and that more sustainable menstrual health interventions could be implemented in climate emergency settings.¹⁰

Over the course of 2022, we defined how we will contribute to this unacceptable public health, economic, social and environmental crisis for women and society. Our approach speaks to our belief that true equality depends on the ability of women and girls to manage their menstruation safely because when they have power over their own bodies, everyone benefits. With adequate means to take care of their periods, women and girls are better able to realize their sexual and reproductive health, to complete their education, and to access and retain jobs. Improved MHH is, therefore, critical to unlock social and economic opportunity.

Without limiting menstruators' autonomy and choice, we also work towards reducing MHH's environmental footprint. This is achieved through government regulation including standards, safe disposal options, and access to reusable products.

In locating our niche, we are committed to work with but not duplicate the efforts of others. This includes those agencies integrating MHH into sexual and reproductive health and rights (SRHR), adolescent and women's health and nutrition outcomes, economic opportunities and psychosocial well-being. The main elements of our approach are:

1. A focus on assisting the process of developing thriving menstrual hygiene marketplaces;
2. A commitment to move periods from economic burden to opportunity, unleashing and capitalizing the economic power of women and securing their voice and place in the value chain to improve outcomes for themselves and business;
3. Identifying the root causes of market shortcomings and building a stronger ecosystem through market-shaping actions along the menstrual hygiene product supply chain;
4. Contributing equally to the strengthening of the sanitation economy as an ecosystem that menstruators depend upon for their sanitation and hygiene access; and
5. Deploys technical assistance to help remove the barriers to SME growth, identifying investable propositions before using our grant funds to unlock financing.



©AfriPads

Our Catalytic Business Model

Working globally and with an initial footprint in Africa, SHF is mobilizing resources to identify, develop and fund a pipeline of investable propositions to drive national sanitation targets and help women gain greater economic hold. SHF achieves scale by making its grants work harder by leveraging up to 10 times of additional resources for every dollar invested. This catalytic approach seeks to unlock the resources of multilateral and national development banks, finance institutions and governments to enable the private sector to build a lasting national sanitation economy and menstrual hygiene marketplace ecosystem.

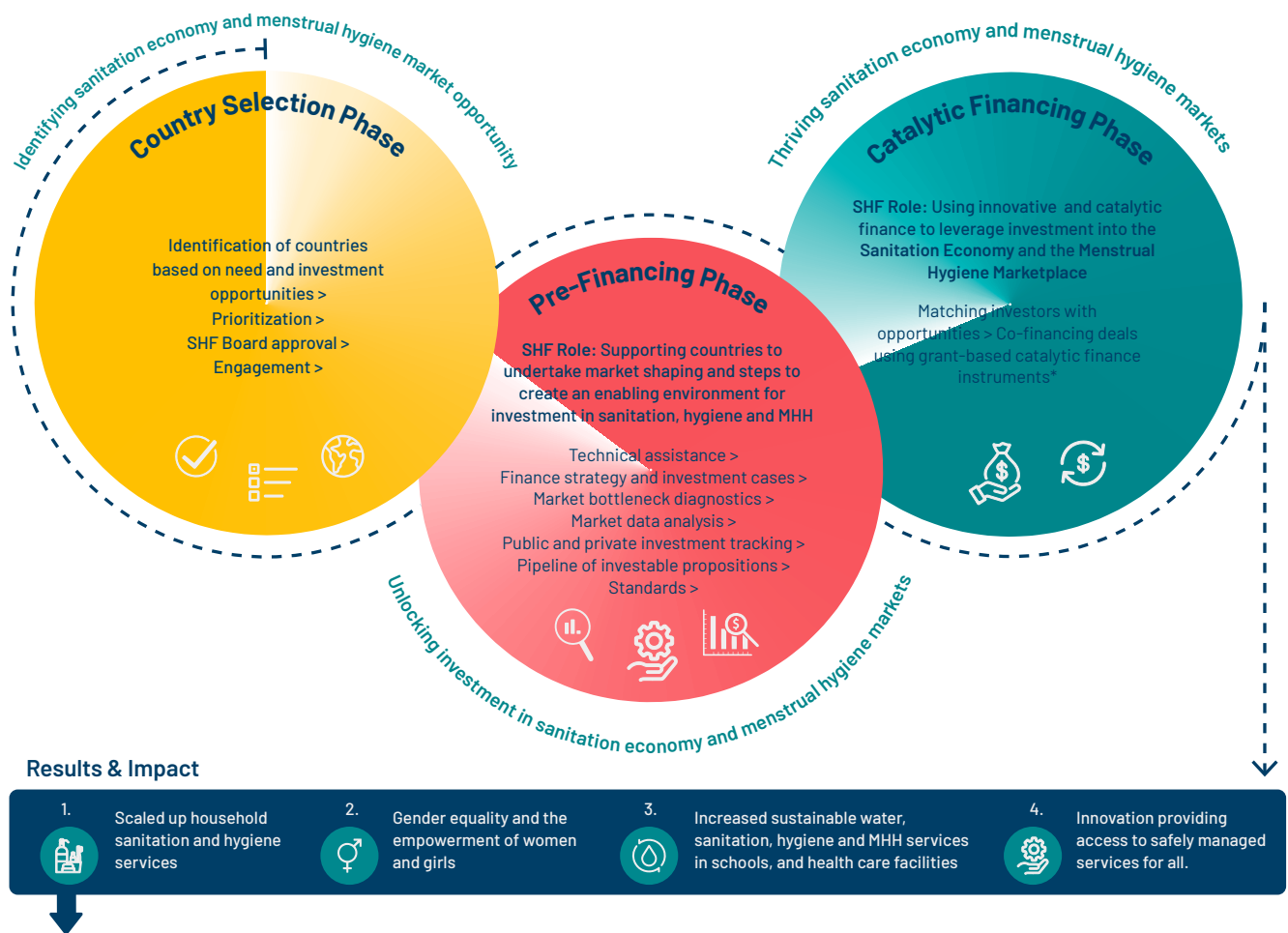
The SHF prioritizes partner countries based on the following criteria; country fragility status, country income level and sanitation and hygiene burden. Prioritized countries are ranked based on country investment readiness and the enabling environment including governance and economic

considerations, and the opportunity for making significant progress towards closing the gender gap.

In the pre-financing phase, SHF works closely with governments and stakeholders to understand the status of market-shaping, identify market gaps, build robust investment cases, and improve the investment environment around the sanitation economy and the menstrual hygiene marketplace.

In the financing phase, SHF will channel grant funding towards innovative solutions that address gaps in the provision of products, services, and facilities acting as a funder and co-investor. We seek to help interventions go to adequate scale whilst ensuring they target the most vulnerable. Our catalytic financing activities are based on equality, viability, sustainability and contribution to the environment and climate resilience. We look for opportunities where our valuable grant resources can be used in a catalytic way.

The SHF approach



A sustainable and equitable future for all.

Gender equality & inclusion

Economic growth

Better education & health

Climate resilience

Note: subject to internal approvals

Figure 2. The SHF Catalytic Business Model

Catalytic Financing

Financial innovations, market-based approaches and engagement of the public and private sector, combined with country leadership and strengthened public and private investment, can deliver thriving and inclusive sanitation economies and menstrual health and hygiene marketplaces. These marketplaces, when linked directly to gender-smart criteria and gender lens investing, will contribute to the pace and scale needed to reach national ambitions, and also create opportunities for women to take economic power.

During 2022 we refined our **strategic framework for catalytic finance** following consultations with Development Finance Institutions (DFIs) and Multilateral Development Banks (MDBs), impact investors, sector networks, the private sector and internal stakeholders.

Our four catalytic financing objectives are to:



1.
Catalyze further investments through tailored technical advice (TA) for enabling environment and country pipeline development.



2.
Engage Multilateral Development Banks (MDBs) and Development Finance Institutions (DFIs) to increase the volume of sanitation based and MHH financing.



3.
Engage institutional, private and impact investors to increase their participation in the sanitation economy and MHH including through incubators and accelerator mechanisms.



4.
Develop longer term options to expand and enhance the SHF's capability to become a leader in the effort to scale up the financing of sanitation, hygiene and MHH.

As a catalytic fund, our work in 2022 enables us in 2023 to focus on co-creating funding opportunities that break the cycle of short-term grant financing that aims to fix sanitation shortfalls project by project. Through our ongoing pre-financing work, we will expand our portfolio to include strategic financing of early investable propositions - pipeline projects - in Africa and Asia.

Examples of catalytic grant-based financing instruments considered:

- Technical assistance funding: Tailored grant-funded TA provided to catalytic finance targets e.g. to improve investment readiness.
- Outcome funding: Based on predetermined impact indicator achievement, to incentivise addressing societal and environmental challenges; involves an independent impact verifier; implementation as e.g. reward payments, loan interest rate discounts.
- De-risking: Grant funding deployed as e.g. a loan guarantee or first-loss facility (take the first loss up to a predefined threshold in the event of losses) to improve the risk-return profile.
- Repayable grant funding: No-interest loans alongside e.g. concessional loans to improve the risk-return profile; can also be deployed as a revolving fund as part of a lending facility of e.g. financial institutions.

Note: subject to internal approvals

Gender Smart, Climate Smart

A sustainable pathway for gender-smart growth

Gender equality is a founding value of SHF. We are passionate about investing in women's agency and power to change how communities, countries and the world respond to development challenges. SHF offers a sustainable pathway to growing sanitation economies and menstrual hygiene marketplaces, and women's economic power. It is based on:

- Country strategies to mobilize capital and investments to close gender gaps,
- Scanning the private sector/SME environment for capability and potential for gender-smart, climate-smart opportunities, supporting local needs and those of co-investors,
- Bringing a gender-lens and climate-lens to TA,
- Intentional support for women leaders, entrepreneurs and gender-inclusive supply chains.

In 2022, SHF conducted initial research into gender-smart sanitation, hygiene and MHH SMEs in Kenya. Having held over 50 in-country consultations with local SMEs, investors (accelerators/impact investors) and key sector stakeholders (consultants, INGOs, government representatives, DFIs, and development agencies), we conclude that the number of sizable SMEs that have reached reasonable scale remains limited. This situation requires solutions to unlock desperately needed capital.



Construction of a faecal sludge plant in Fort Portal, Uganda. ©Elke de Buhr/SHF



©Sanivation

We have also learned that opportunities exist with early-stage SMEs (not yet reaching scale) that are typically funded by local start-up accelerators, incubators and various small grants. Considering that many SMEs are fledgling and few in number, it is critical to identify investment vehicles that can accommodate this often precarious situation, embrace early gender-smart activities and still produce acceptable social or economic return. This requires a strong understanding of local conditions and markets.

With this knowledge, SHF is looking to partner and provide catalytic grant funding to organizations that support micro enterprises and growth-oriented early-stage SMEs. These organizations include for example microfinance institutions, commercial banks, and startup accelerators and incubators that have local presence and strong understanding of the local market. This approach will help build SMEs that can potentially be attractive to commercial impact investors and development finance actors. These investors have the capability to invest substantial amounts of capital, which would then enable sizable scale and impact. To support these efforts, SHF is building a pipeline of strategic partnering opportunities with impact investors and development finance partners to create thematically aligned funds/facilities for grant-based catalytic financing such as de-risking, technical advice and outcome funding.



Public toilet in Kenya.
©Elke de Buhr/SHF

pathway towards a more inclusive, sustainable and/or a climate-smart direction.

Promising initiatives include, but are not limited to, developments in Uganda where the circular sanitation economy will be advanced via the treatment and recycling of faecal sludge into briquettes for cooking, reducing the field finding burden on women and contributing to the reduction of local deforestation; and the deployment of climate-resilient double leach pit toilets that can withstand climate and environmental shocks. Similarly in Kenya, the city-wide inclusive sanitation (CWIS) plan outlines a phased approach for sanitation, excreta and wastewater management and re-use, identifying four types of sanitation systems to address different income and density needs. This type of work will be developed further with partners across the sector and multilateral financing institutions in 2023 and beyond.

SHF also believes that a critical step towards menstrual equity is increasing awareness of the environmental impact of single-use menstrual products and creating opportunities for the availability of environment and climate-smart reusable options. There is scope for women to play a greater role in the production of environmentally-friendly products at a scale and level of sustainability not yet seen and in the operation of services needed to safely manage disposable waste. However, a shift in this direction requires concerted effort on the part of governments to support MHH market-shaping and innovative ways to structure financial support. Initiatives must extend to policies for menstrual product accessibility, taking into account distribution, consumer exposure to different products, their preference and affordability.

Climate-smart development

A basic or safely managed sanitation system does not mean it is climate resilient. To ensure a sustainable, equitable and climate-resilient future for all, it is critical that finance is directed into organizations and activities that directly support the advancement of climate-resilient and climate change mitigation alongside financial returns. In 2022, SHF started to explore options, including prioritizing project funding for activities designed to shift the development



Regen Organics' (previously Sanergy) faecal sludge and agriwaste treatment plant in Ngelani City, Kenya (left and center). Faecal sludge treatment process output product (briquette) in Sanivation's Naivasha (Kenya) FSTP (right). ©Anton Jantunen/SHF

3. Country Engagement



©Elke de Buhr/SHF

At the heart of our business model is dialogue with stakeholders in prioritized countries to reach a common understanding of what constitutes the sanitation economy and the menstrual hygiene marketplace, define the status and potential of these market opportunities and identify the activities needed to activate incoming finance, for example, investment cases, financing strategies and regulatory actions. We work with national, regional and international

financing sectors to understand their needs and identify the type of transactions they are willing to support. We also get to know the private sector to understand their perspectives, operating constraints, market gaps and opportunities. By collectively identifying investable propositions, SHF is able to use its grant funds to catalyze or leverage incoming financing to move the sanitation economy and menstrual hygiene markets forward.

Pre-Financing: Strengthening the Enabling Environment

In 2022, we started pre-financing work in a number of African countries. Multi-stakeholder mechanisms in each country led a dialogue on the type of activities that would accelerate delivery of national SDG 6.2 strategies and complement the work of other development partners.

SHF pre-financing support is implemented through tailored technical assistance, supporting the activities summarized below (see Table 3).

Activity area	Country
1. Sanitation Economy and Menstrual Hygiene Marketplace Assessments	Benin, Kenya, Nigeria, Sierra Leone, Uganda
2. WHO WASH Accounts	Benin, Burkina Faso, Kenya, Nigeria, Sierra Leone, Uganda
3. Country Investment Case, Financing Strategy, Investment Concept Notes and Long-List of opportunities and Key Public Sector Reforms	Kenya, Nigeria, Sierra Leone, Uganda
4. Strategic Evidence Building/MHH Impact Estimates	Global

Table 3. SHF Pre-Financing Engagements in 2022

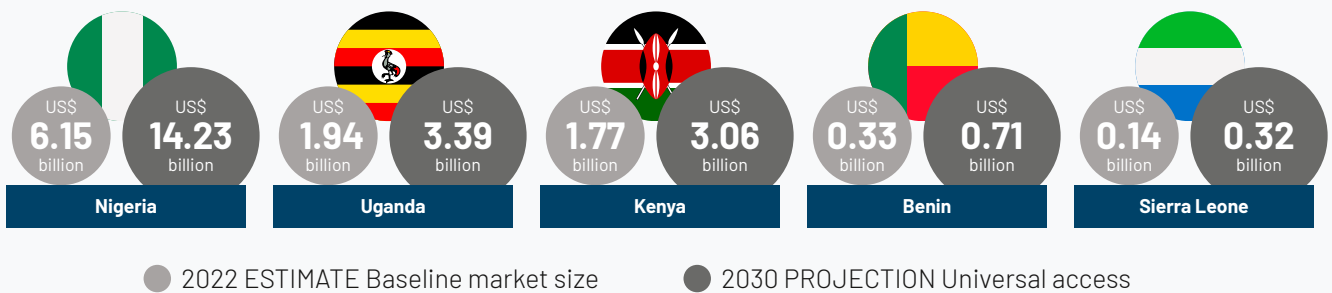
Sanitation Economy and Menstrual Hygiene Marketplace Estimates

In 11 countries, we are drilling into the sanitation economy and menstrual hygiene marketplace to understand their value. This information, expressing the current estimated

value of the market economies, and projections for 2025 and 2030, will inform country investment cases and start to expose opportunities for investors, enabling national governments to better position a country as investor-ready. In 2022, market estimates were developed for Benin, Nigeria, Sierra Leone, Kenya and Uganda.

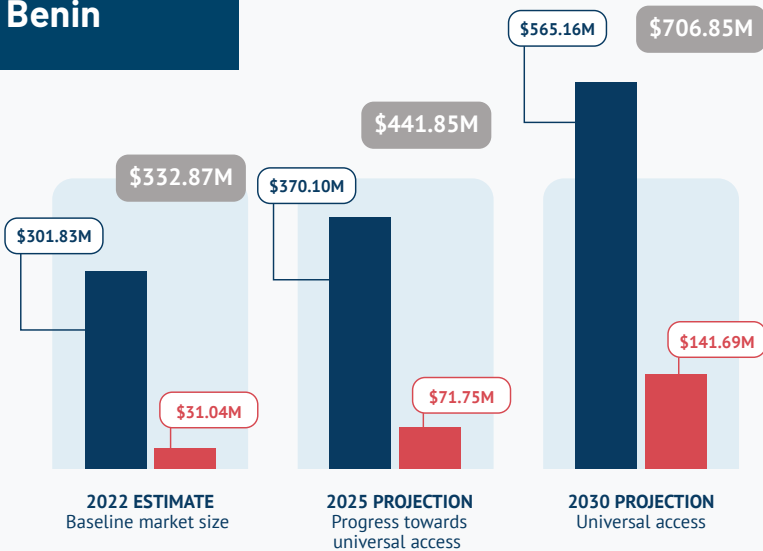
Country market estimates overview

The high-level estimates shine a spotlight on the size and potential of the sanitation economy and menstrual hygiene marketplace.



■ SANITATION ECONOMY ■ MENSTRUAL HYGIENE MARKETPLACE ■ TOTAL SANITATION ECONOMY & MENSTRUAL HYGIENE MARKETPLACE

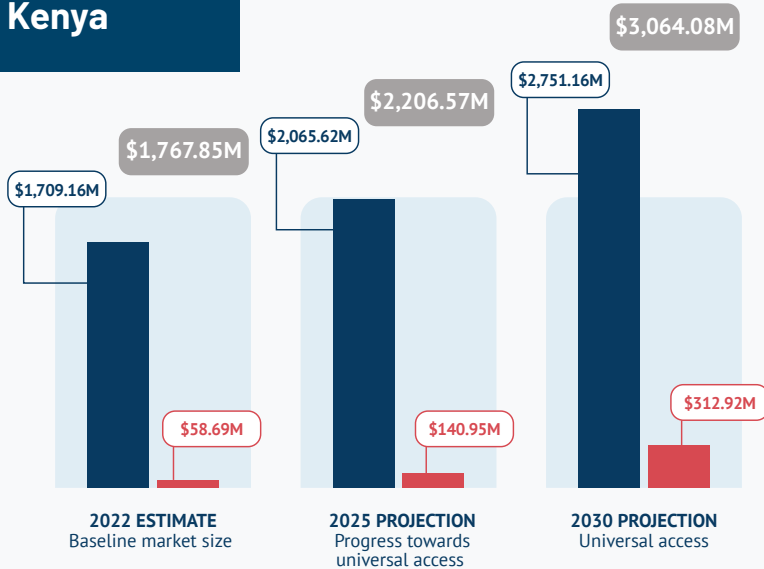
Benin



- Currently at 13 million people, Benin's population could grow 24% to 16 million by 2030.
- Up to 49% of Beninese are living in urban areas.
- It has a very young population with two-thirds under 25 years.
- Benin's economic growth improved in 2021 to 7.0% compared to 3.8% in 2020.

The sanitation economy and menstrual hygiene marketplace potential is currently estimated at US\$ 332.87 million. This estimate might increase by more than 2 times its value to US\$ 706.85 million in 2030.

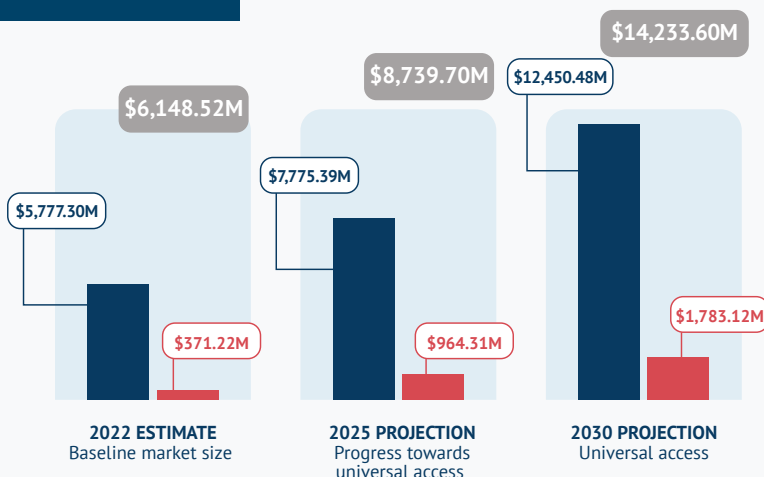
Kenya



- Young and growing rapidly, the Kenyan population is estimated to almost reach 68 million in 2030.
- Up to 71% of the population still lived in rural areas in 2022.
- In the largest economy of the East African Community, sanitation is included as a basic right under the 2010 Kenya Constitution.

The sanitation economy and menstrual hygiene marketplace potential is currently estimated at US \$1.77 billion with the potential to almost double to US \$3.06 billion in 2030.

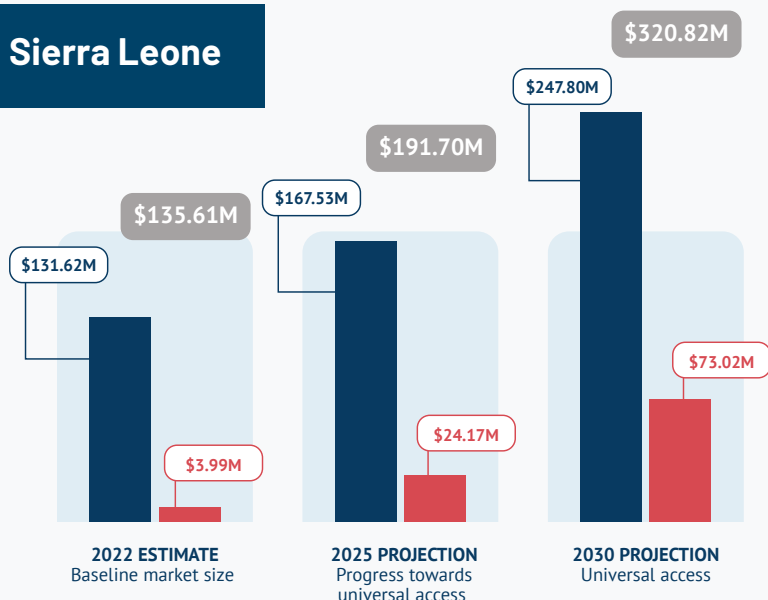
Nigeria



- The most populous country in Africa with a population of 211 million, it is estimated to reach 271 million by 2030.
- Up to 53% of Nigerians are living in urban areas.
- There are 49 million households, rising to 56 million in 2030
- Ranked the top economic power in Africa, expected to be in the top 20 world economies in 2030.

The sanitation economy and menstrual hygiene marketplace potential is currently estimated at US \$6.3 billion, with the potential to more than double to US \$14.2 billion in 2030.

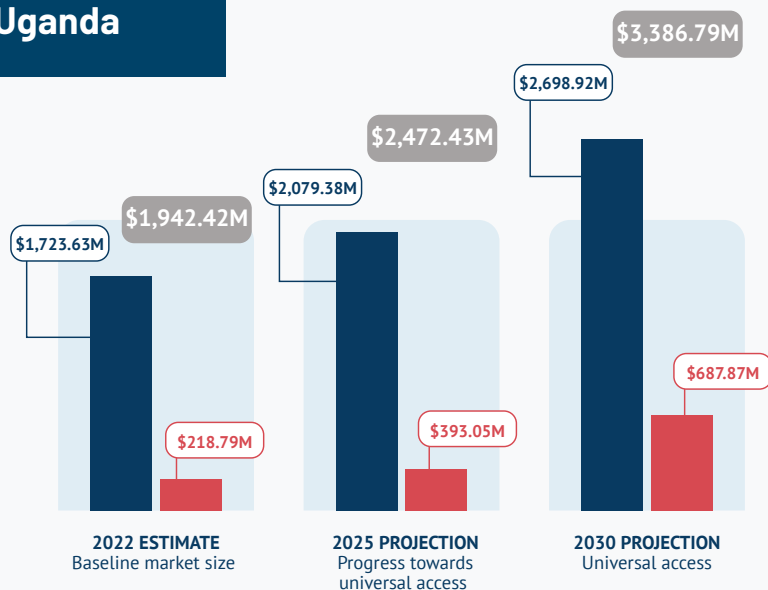
Sierra Leone



- The population of Sierra Leone is projected to reach 10 million by 2030.
- In 2021, 57% of the population still lived in rural areas.
- The IMF projected Sierra Leone's GDP to grow consistently at 2.4% in 2022, doubling to 5% in 2025.

The sanitation economy and menstrual hygiene marketplace potential in Sierra Leone is currently estimated at US\$ 135.61 million. This estimate has the potential to more than double to US\$ 320.82 million in 2030.

Uganda



- With 45 million people, Uganda is one of the most populous countries in Africa and could reach 63.8 million by 2030.
- Almost 3 out of 4 Ugandans live in rural areas.
- Up to 700,000 young people join the labor market each year.
- Uganda is the third largest economy in the East African Community and it is expected to be among the fastest-growing economies by 2030.

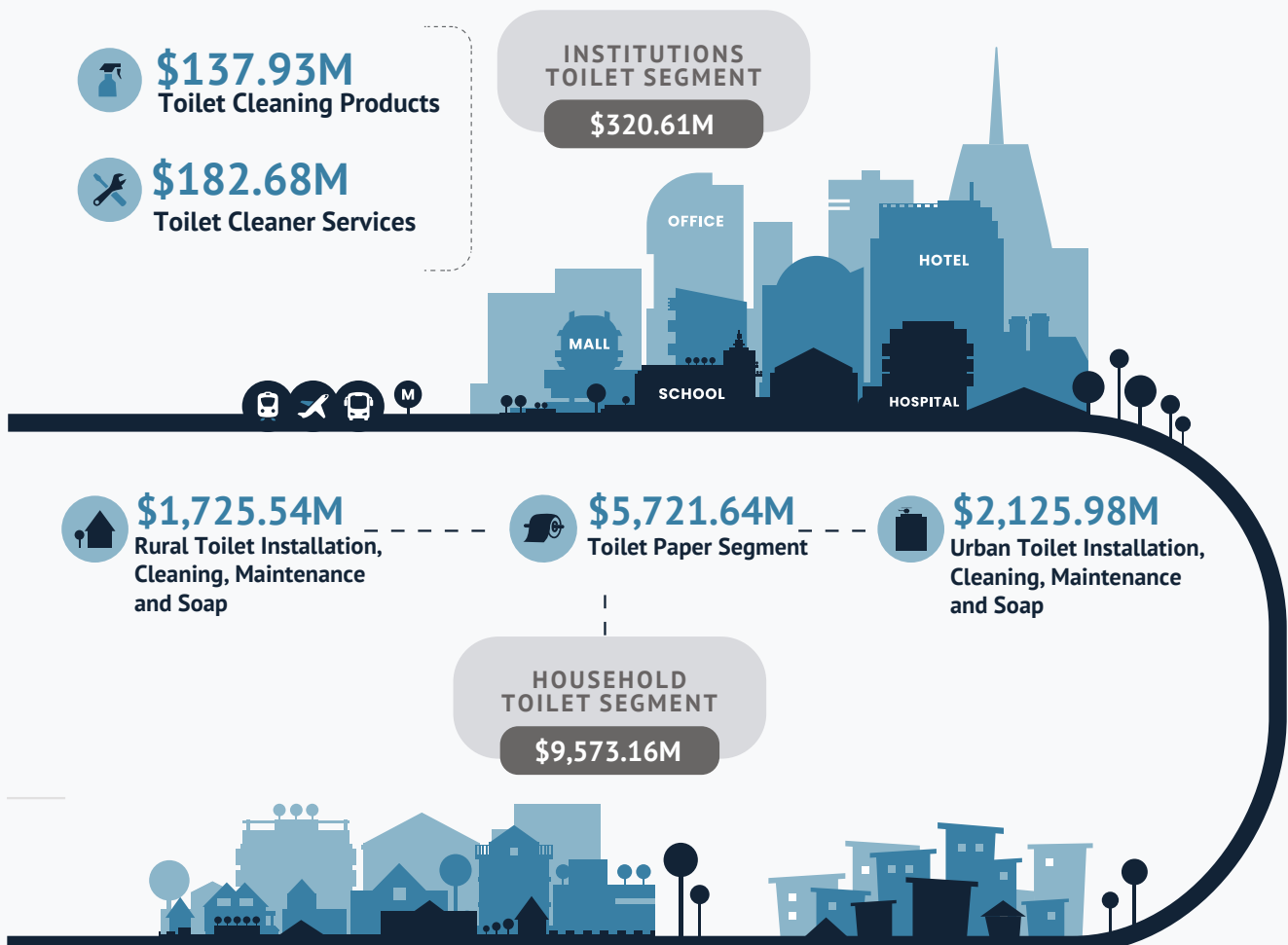
The sanitation economy and menstrual hygiene marketplace potential is currently estimated at US \$1.94 billion, with the potential to increase to US \$3.39 billion in 2030.

Nigeria market estimates snapshot

Sanitation economies (toilet economy, circular sanitation economy and smart sanitation economy) and menstrual hygiene markets (menstrual products, circular MHH and smart MHH) focus on products and services, renewable resource flows, and data and information to transform cities, communities, and businesses in pursuit of national targets for equitable and sustainable development. Even though some of these markets are still small, each has the potential to reach a significant size, as illustrated at the example of the Nigerian economy below.

The **toilet economy** is the marketplace of products and services that provide safe toilet and handwashing access for all, whether public or private.

HIGH-LEVEL MARKET ESTIMATE FOR 2030 TOILET ECONOMY (IN US\$ MILLION) PROJECTION Universal Access



The Nigerian toilet economy has the potential to grow from an estimated value of US\$4.7 billion in 2022 to almost US\$10 billion, once universal access has been achieved.

The **circular sanitation economy** includes the systems that connect the biocycle, using multiple forms of biological waste, recovering nutrients and water, and creating value-adding products such as renewable energy, organic fertilizers and proteins.

MARKET ESTIMATE FOR 2030 CIRCULAR SANITATION ECONOMY* (IN US\$ MILLION)



\$1,714.13M
Emptying and Transport



\$3.20M
Biochar



\$34.54M
Phosphate



\$4,322.05M
Biogas



\$113.57M
Compost



\$35.81M
Potassium



\$572.39M
Electricity



\$43.23M
Nitrogen



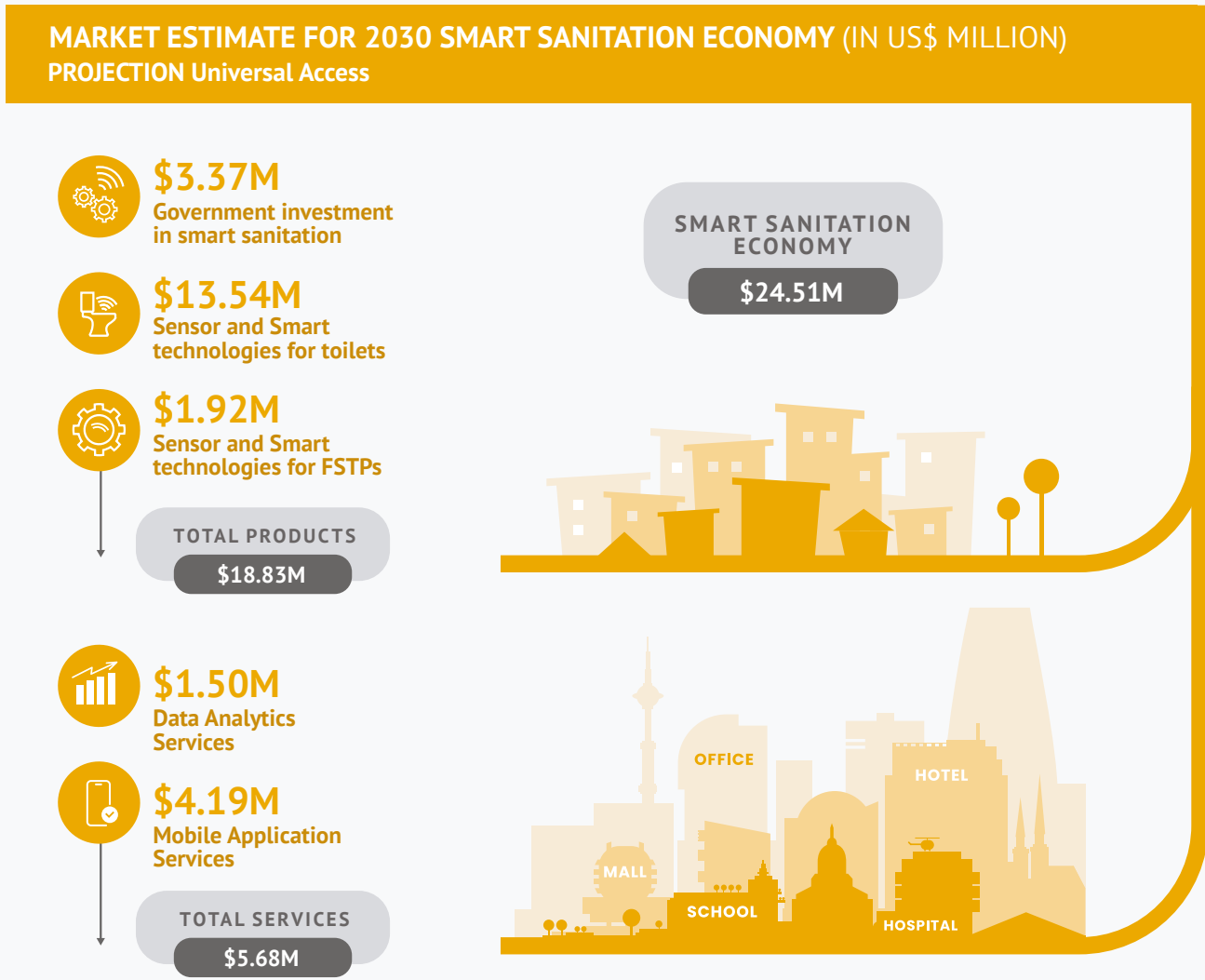
\$818.07M
Protein meal - Black Soldier Fly Larvae



The Nigerian market for emptying and transport is relatively strong with an estimated value of US\$ 735.3 million in 2022, and the potential to reach US\$ 1.7 billion by 2030.

In terms of resource recovery, biogas shows the largest potential with an estimated value of US\$ 1.9 billion in 2022 and the potential to grow to US\$ 4.3 billion.

The **smart sanitation economy** includes the digitized sanitation and hygiene systems that optimize data for operating efficiencies, maintenance, plus consumer use and health information insights.

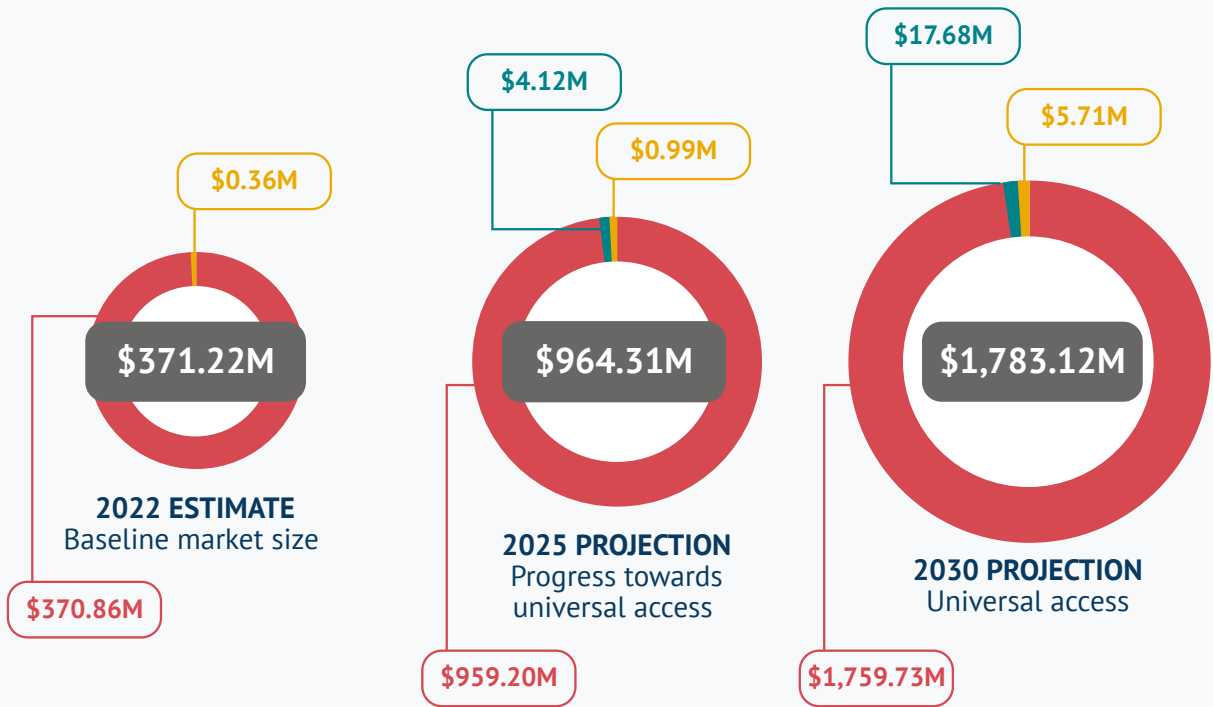


The smart sanitation economy in Nigeria is valued at US\$ 8.3 million in 2022, with the potential to triple to US\$ 24.5 million.

The **menstrual hygiene marketplace** provides access to products and services, including menstrual products, circular MHH and smart MHH solutions.

MARKET ESTIMATES FOR MENSTRUAL HYGIENE MARKETPLACE (in US\$ million)

■ MENSTRUAL PRODUCTS
 ■ CIRCULAR MHH*
 ■ SMART MHH
 ■ TOTAL MENSTRUAL HYGIENE MARKETPLACE



The menstrual products market is valued at US\$ 370.9 million and has the potential to grow to US\$ 1.8 billion. The circular MHH market is only emerging, but has the potential to grow as more commercial menstrual products are being used. The smart MHH market has an estimated value of US\$ 0.36 million in 2022 and the potential to grow to US\$ 5.7 million.

Tracking Sanitation Finance

A robust financing strategy for increasing finance to sanitation, hygiene and MHH requires a nuanced understanding of the costs of reaching national targets and current expenditure from all sources of finance. Therefore, a key element of the pre-financing phase is support to governments to improve tracking of financial flows to the sector (through WASH accounts) and this is being delivered in partnership with WHO.

The SHF and WHO partnership is currently providing technical support to governments in Benin, Burkina Faso, Kenya, Nigeria, Sierra Leone and Uganda. The intention is to provide improved data sets on financial flows to the sector and use this to inform planning, decision-making and development of financing strategies to attract new investment.

The six countries are at varying stages of WASH accounts development; some countries have completed prior cycles of WASH accounts and for others, this will be the first cycle. Updated data or first time estimates are expected from all countries by the end of 2023. In 2022, SHF also supported the finalization of GLAAS survey data collection in Benin.¹¹

Technical Assistance for Investment Readiness

SHF is providing tailored Technical Assistance to Kenya, Nigeria, Sierra Leone and Uganda to become more investment ready so that new and additional financing can be unlocked for the sanitation, hygiene and MHH sectors.

In 2022, Technical Assistance support was initiated in four countries: Kenya, Nigeria, Sierra Leone and Uganda, including technical assistance scoping and methodology development (country investment case, financing strategy, investment concept note, key public reforms), terms of reference development including alignment meetings with country stakeholders, stakeholder mapping and the development of deliveries templates and interview guides. The inception phase is followed by a situation analysis in early 2023. This work will expand to more countries, including in Asia in 2023.

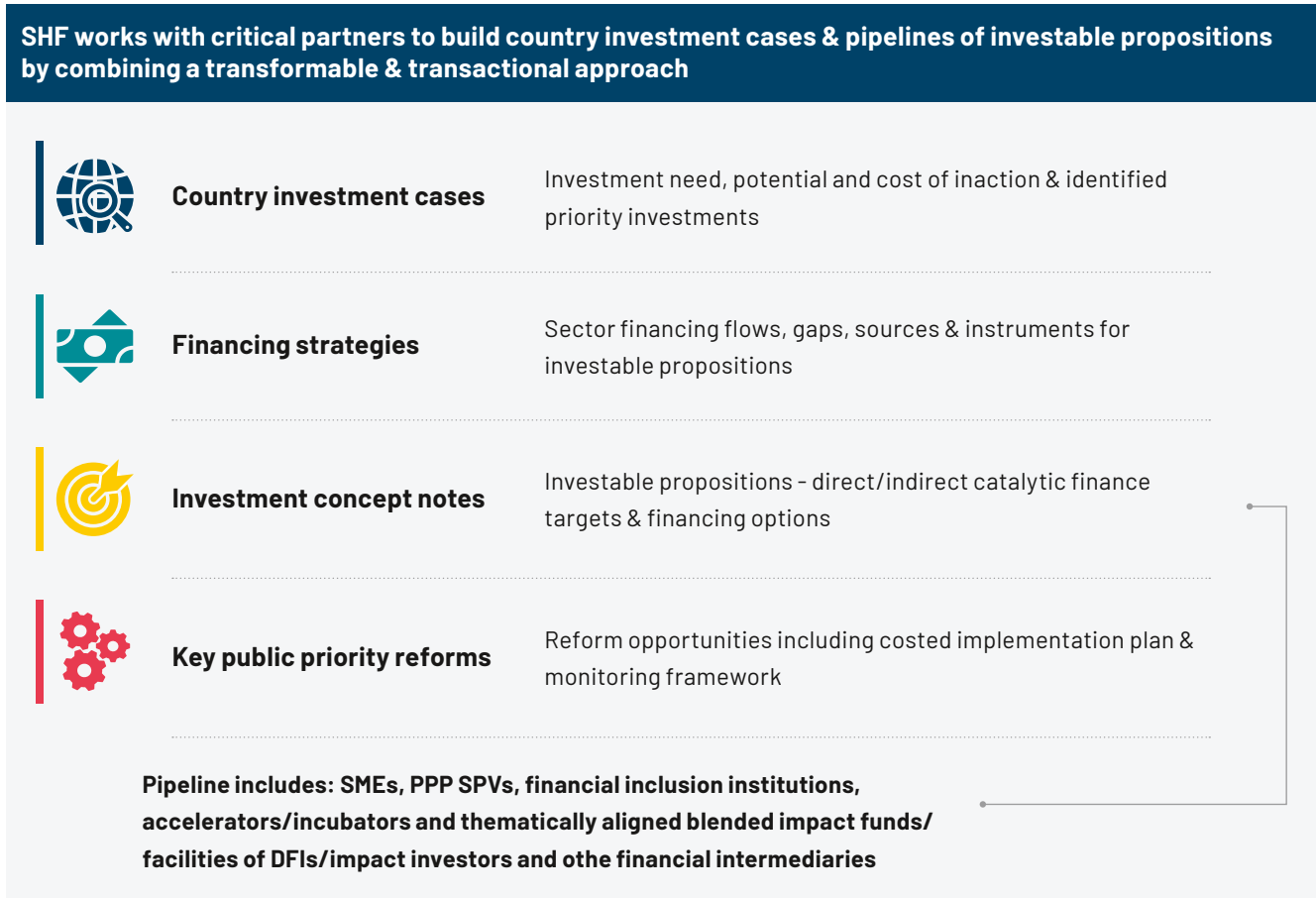


Figure 3: SHF Technical Assistance Approach

Evidence Building to Support Market Shaping

As countries begin to look at sanitation and menstrual hygiene market-shaping activities, SHF is contributing evidence and data. This includes assessing the market potential and opportunities, and the benefits associated with different types of interventions relative to their costs. SHF is also contributing to the body of knowledge around quantitative data on the longer term health, education, economic, climate and environmental impacts of investments in sanitation, hygiene and MHH. This includes work to quantify climate resilience and the broader gender and human development impact of different types of investments.

SHF is:

- Supporting 11 countries, over the course of 2022 and 2023, to better understand the **potential of the sanitation economy and menstrual hygiene marketplace** and how this information can assist the process of economic growth, attracting investments,

and closing the sanitation, hygiene and MHH gaps. This information, expressing the current value of the sanitation economy and menstrual hygiene marketplace and projections into the future, will support country-owned investment cases and pipeline development. It is an important step toward a national government being able to position a country as investor-ready.

- Providing countries with a **methodology, dataset and estimates that quantify the potential and impact of a range of MHH interventions**. This contributes to a better understanding of the needs, gaps, opportunities, and costs associated with different types of MHH interventions, and estimates of the health, education, economic and environmental impacts from improved access to MHH products and services. It also generates evidence needed for increased investments in MHH to close equity gaps, with health, education, economic and environmental benefits for all people who menstruate and communities at large.
- Developing **indicators, methodology, a dataset and estimates that quantify the environmental benefits associated with circular sanitation economy investments** with a focus on private sector innovation towards safely managed sanitation along the sanitation value chain from containment to emptying, transportation and reuse of faecal waste. Using available data sources including data from SHF-supported projects and modeling techniques, it generates estimates of the social, environmental and financial returns of investments in climate-resilient sanitation and hygiene and nature-based sanitation and hygiene solutions.



Country Project Funding: Laying Foundations for Market Growth

As an early demonstration of the type of results that can be delivered through sanitation economy and market-based interventions, SHF is finalizing grant funding for two countries - Kenya and Uganda for commencement in 2023. Meanwhile, defining our engagement with Nigeria is ongoing.

- In **Kenya**, the project is expected to focus on five cities. The project will adopt a socially inclusive market systems development approach, deploying contextualized, supply-side intervention, which responds to the demand for sanitation, hygiene and MHH products and services in households and schools in low-income urban areas. The project will also support private sector SMEs and public service providers

to build capacity and expand market share through appropriate, financially viable, scalable, and sustainable approaches.

- In **Uganda**, the aim is to increase access to improved sanitation and hygiene and MHH in communities and public institutions (schools and healthcare facilities) in seven districts, including four towns, by adopting the approaches in the new Uganda National Sanitation Marketing Guidelines for Basic Sanitation.¹²

The projects will also seek to transfer evidence, effective models, learning, integration of innovation and market-driven approaches with mandated institutions and social enterprises.



Faecal Sludge collection in Nairobi, Kenya. ©Elke de Buhr/SHF




Faecal sludge transportation in Kenya. ©Anton Jantunen/SHF




Safe toilet construction in Fort Portal, Uganda. ©Eike de Buhr/SHF

Expected impact

Total Investment and Expected Results from Grant Funding to Kenya and Uganda



US\$ 8 million committed
Kenya US\$3 million, Uganda US\$ 5 million



4+ million lives impacted

 <p>2.8 million individuals with improved access to sanitation and hygiene</p>	 <p>715,000 individuals with climate resilient sanitation and hygiene</p>	 <p>140 sanitation and hygiene businesses supported</p>	 <p>4.2 million women and girls with improved MHH information and products</p>	 <p>180 schools & 40 health care facilities with improved WASH & MHH access</p>
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Note: Expected results from direct funding to Kenya and Uganda only, not including additional results from co-financing.

4. Accountability for Impact



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In 2022, SHF focused on building a robust and accountable organization, with a strong emphasis on managing risk. We developed a high-level results framework and internal performance monitoring mechanism. We also set up a results-based monitoring and evaluation system for

our grant funded-activities. We further developed the processes of a functioning organization within UNOPS structures and frameworks, built key partnerships and managed our risks.

Results-Based Monitoring and Evaluation

Our Monitoring and Evaluation Framework addresses the information needs of the 2022-25 Strategy and Strategic Framework. It manages the collection of adequate data and evidence including for annual and donor reporting, resource mobilization, innovation around financing modalities, and market-based sanitation, hygiene, and MHH solutions, and for closing data gaps and strengthening the available evidence base especially around costs and benefits, and the measurement of impact.

SHF has 10 key performance indicators (KPIs) designed to assess results and performance and ensure that we deliver against our Strategy and agreed results targets for sanitation, hygiene and MHH with evidence of long-term sustainability and impact. The KPIs measure increased access to sanitation, hygiene and MHH; increased investments into the sector; a growing market that is inclusive, climate resilient and sustainable; strengthened government systems and national data; and the broader human development impact on the environment, health, education, jobs and economic well-being, inclusion and gender equity.

The SHF KPIs are operationalized by a set of country-level core results indicators. Through bi-annual results reporting by primary recipients, which is independently verified, data collected at the community and country levels provide evidence of project performance and outcomes. The longer term impact and sustainability of our catalytic financing activities are verified by regular evaluation exercises.

SHF implements annual work planning exercises, and quarterly strategic and work planning reviews. Internal performance is tracked by a set of internal performance indicators, each with a yearly target, which are updated each quarter and monitored by the SHF Board.



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Capabilities and Operational Excellence

SHF adheres to UNOPS norms and procedures. As a new entity, a considerable amount of time has been dedicated to setting up the processes of a functioning organization within these structures and frameworks. SHF recognizes the contribution of its workforce to the achievement of the goals. The human resources (HR) plan for 2022 has been fully implemented to ensure that we have the relevant expertise for our core functions. Gender balance and diversity is an important component of our staffing with more than 80% of female staff. We have embraced post-covid new ways of working and ensured support staff for an efficient work-life balance.

SHF 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 the SHF donors concluded “the control of internal project processes is excellent” and “we believe that the control and governance processes put in place by the SHF should serve as a model.”

“Our overall assessment is positive, while noting the risks arising from the particularities of an innovative business model. To achieve this, SHF has set up a competent, multidisciplinary and highly complementary team, enabling it to cover all the main issues, which are the development of a clear strategy, the ability to steer it, the anticipation of legal aspects, financial management and deployment via clear and rigorous selection processes. SHF’s project team systematically identifies the risks associated with their activities. The principles of a three-tiered risk management system are applied throughout their various activities. The system demonstrates that numerous mitigating measures are systematically taken as soon as risks are detected.”

Partner Risk Assessment, SDC, 2022

SHF Governance

As a UN fund, the SHF was set up with a robust, and effective governance framework. With limited delegation of authority, and clear segregation of responsibilities, our governance is composed of multiple layers. It is an iterative system of checks and balances where risks and issues are thoroughly managed.

The [SHF Board](#) was established in late 2021 and became fully operational in 2022. The Board comprises exceptional leaders and experts in development financing, impact

investing, entrepreneurship, innovation and accountability. The members provide leadership, strategic guidance, advice and oversight, including through two committees, the Finance, Risk and Audit Committee (FRAC) and the Impact Investment Committee (IIC). Champions of women’s empowerment, our Board is passionate about doing things differently and well.

5. Forward Look



2022 has been a year of relentless global shocks, destabilizing growth and development. However, as we reflect there are many positives: our engagement with country partners to advance off-grid sanitation economies is coming to fruition, the SHF profile continues to rise and the message about the need to catalyze investment into the sanitation economy and to accelerate progress on menstrual health and hygiene is being universally well-received. This progress has been made despite the significant external headwinds and we are confident about the future.

As we look ahead to 2023, we have four main priorities:

1. Focus on delivery and impact
2. Strengthen our capability for the future
3. Build partnerships and collaboration
4. Innovate for evolving needs



Endnotes

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- 10 Moore, E. (2022). Effects of Climate Change on the Menstrual Health of Women & Girls in Rural Settings within Low-Income Countries. Available at: [https://academiccommons.columbia.edu/doi/10.7916/bqyy-vh75#:~:text=Five%20themes%20that%20emerged%20included,change%20is%20exacerbating%20water%20challenges; see also: Alugnoa, D.N., Cousins, T., Sato, M. \(2022\). Period Poverty and Menstrual Belonging: A Matter of Climate Justice. In: The Lancet. Vol 6, July 2022.](https://academiccommons.columbia.edu/doi/10.7916/bqyy-vh75#:~:text=Five%20themes%20that%20emerged%20included,change%20is%20exacerbating%20water%20challenges; see also: Alugnoa, D.N., Cousins, T., Sato, M. (2022). Period Poverty and Menstrual Belonging: A Matter of Climate Justice. In: The Lancet. Vol 6, July 2022.)
- 11 GLAAS (2022). UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) 2022. Available at: <https://glaas.who.int/>
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The Sanitation and Hygiene Fund (SHF) is a part of UNOPS.



The Sanitation & Hygiene Fund