



Structuring Innovative Islamic Social Finance Mechanisms

SDG 6:

Clean Water and Sanitation

Section 1: Background, Rationale and Progress on Islamic Finance

Section 2: Proposal for The Global Water and Sanitation Initiative (2005 – 2025)

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Section 1: Background, Rationale and Progress on Islamic Finance

Background

Despite huge economic and social progress globally, there remain persistent challenges that are exacerbated by prolonged crises, climate change and rising inequality. Besides imposing social and environmental costs, severe inequality adversely affects economic growth and wealth creation. The question at hand: How can we reduce inequality and better serve communities?

The role of Islamic Finance in economic development has already unlocked tremendous potential and in its social dimension offers a greater opportunity in bridging the financing gap in order to meet the Sustainable Development Goals.

To date, most international development and humanitarian organizations have not engaged with Islamic Financing, largely overlooking the potentially significant contributions that this growing field offers in reducing inequalities and supporting communities affected by humanitarian crisis—most of whom are in member countries of the Organization of Islamic Cooperation (OIC). The Secretariat of the Federation in partnership with National Societies, established a Global Innovative Financing Team (GIFT) and has embarked on an unprecedented exploration that can leverage and create meaningful impact on financing for humanitarian and development interventions.

There has been increased hype recently around Islamic Finance and what it could possibly mean for the humanitarian and development sector. The principles of Islamic Social Finance provide a shared foundation of social and economic justice, that can contribute to prosperity through the principles of inclusive participation and risk sharing. The commonality of purposes with the humanitarian sector is apparent.

Yet, despite the hype, we found that explorations so far seem to barely scratch the surface in how they understand the applicability, potential and most importantly the principles that underpin this financing methodology. Multilateral Development Banks (MDBs) such as the Islamic Development Bank Group (IDBG) together with the World Bank have done extensive research on the topic but the theory has struggled to translate into actual practice for most development and humanitarian organizations.

Therefore, the Islamic Social Finance (ISF) initiative within IFRC's Innovative Finance portfolio seeks to explore the opportunities to apply ISF instruments to fulfil the SDG financing gap, as well as to address

the needs of communities faced with development challenges and humanitarian crises. Through its network of National Societies, auxiliary to Governments in 190 countries including OIC MCs, the Federation is in a unique position to not only leverage potential for ISF as a form of development financing but also strengthen capacity on the ground.

Rationale

• Principles

Islamic Social Finance together with the Humanitarian and Development Sector provides a shared foundation for social and economic justice that can contribute to shared prosperity through the principles of inclusive participation and risk sharing

“Our rituals are there, but often they lack the spirit. Our giving shouldn't be driven by our desire to prove that we are good people... Our giving should be smart and effective.”

~ Tariq Cheema, Founder, World Congress of Muslim Philanthropists

• Potential

Humanitarian Financing fell short by 38% while aid to least developed countries fell by 3.9%. Additionally, the UN estimates that countries will need \$2.5 Trillion annually to meet the SDGs.

Islamic Financial Analysts estimate that every year, between US \$200 Billion to \$1 Trillion is spent in mandatory alms (zakat) and voluntary charity (saqdaqah) across the Muslim World.

• Challenges

Across the Muslim world, there is an increased awareness that if zakat distribution and management is made more effective, revolution in terms of development may be experienced, not only for Muslims but for all humanity.

• Narrative

We have an opportunity to rewrite the popular narrative by demonstrating the intentions and value of Islamic Social Finance for meeting humanitarian and development needs.

Approach

As an initial step, in partnership with INCEIF – the Global University for Islamic Finance – we convened a consultation that included humanitarian and development practitioners, leading Islamic scholars and financiers.

The purpose of the consultation was deepen the understanding of ISF instruments and their potential, as well as understand the depth of challenges in the humanitarian and development context. Specifically, what might be the most appropriate

funding models that respond to these challenges, which instruments would be the best fit, and finally, which projects might be piloted on these new modalities.

Further, we also partnered with AID: Tech – a leading start-up on blockchain proactively explore how we might capitalise on new and emerging trends such as fintech and data-driven insights to gain enhanced efficiency and effectiveness in our responses.

The consultation also shed light on the key challenges that hinder ISF, thereby confirming that this triangular partnership offers an opportunity to collaborate and collectively guarantee greater accountability, support vulnerable communities and improve impact at scale.

Progress so far

What is unique in our approach is that whilst targeting Islamic contributions we are simultaneously customising our research efforts in understanding regulations, perceptions and key players in Muslim countries to facilitate effective application of ISF. This effort requires customised approaches for Muslim minorities with significant economic capacity such as those in the UK and Canada. The primary instruments we are exploring are the use of Zakat, Sadaqah, Sukuk, Waqf and Takaful.

Following our first global consultation, we have identified several projects in the pipeline, including targeting drought in Kenya and global Cholera hotspots through One WASH, supporting differently-abled children in Palestine and Forecast-based Financing in flood risk areas in Africa and the Asian sub-continent.

The over-arching objective is to collaboratively structure Islamic social finance experiments across countries for humanitarian and development challenges and underpin fintech as a key enabler in ensuring that there is improved efficiencies and transparency, thus achieving intended impact at scale.

Achievements

1. Since the beginning of our exploration, we are proud to share that we co-designed an international Zakat financing instrument in support of Kenya's Drought Assistance Programme. In response to the need, MAIPS pledged CHF 1.17 million in zakat financing. The project has already impacted more than 1 million lives, and with a mechanism for refund of CHF 500,000, a sizeable number of additional communities stand to benefit, demonstrating the transformative impact of zakat and Islamic Social

Financing. MAIPS through this first ever international Zakat financing project, illustrated how Zakat can be used for communities in need, ensuring sustainability and establishing clear leadership.

2. A second initiative emanates from understanding the challenges of ineffective management and lack of transparency as it currently exists in ISF. We co-designed a blockchain application that helps address these challenges, providing traceability and transparency on a seamlessly accessible platform to transform social financing through the ISF paradigm. In early 2018, the application won the global competition for fintech in ISF, organised by the IDB and IE Business School, recognising its potential and helping gain credibility in the ISF space. The application is currently in the process of being tested, targeting select OIC member countries and countries with economically capable Muslim minorities that intend to distribute their zakat more efficiently.

3. A third initiative is focused on our efforts to encourage conversation on Islamic Social Finance and showcase its immense potential across countries and sub regions. Contemporary ISF is nascent and is yet to gain sufficient prominence at global dialogues for it to develop into structured and more sophisticated development instruments. There is therefore an opportunity to facilitate tangible debate and thought on ISF and its potentially significant contributions to the humanitarian and development space. Similar to the consultation in Malaysia, interest has also been generated in Africa, and the MENA region, and from dedicated partners that are willing and able to facilitate this dialogue as a matter of urgency.

4. A final and most innovative initiative underway is a shariah compliant social impact bond model for the Global Water and Sanitation Programme. Together with partners INCEIF, we have structured an innovative sukuk convertible to waqf model to raise investments for a global one WASH programme for target countries especially in fragile states, potentially working with up to 18 National Societies.

Section 2: Proposal for The Global Water and Sanitation Initiative (2005 – 2025)

Context

Increasing access to safe water and sanitation for all: Having reached over 15 million people between 2005 and 2015, we plan to reach a further 15 million by 2025.

The Red Cross Red Crescent Global Water and Sanitation Initiative (GWSI) promotes a common but adaptable approach amongst National Red Cross

Red Crescent Societies to establish large-scale, long-term sustainable water and sanitation programmes. It aims to continue its efforts in scaling up equitable, sustainable and affordable access to water and sanitation services for all and thus contributing towards achieving the Sustainable Development Goals.

The Challenge

The Millennium Development Goal (MDG) target of halving the number of people without access to basic sanitation by 2015 has fallen short. The world has met the MDG target of halving the proportion of people without access to safe drinking water. However, in 2012 an estimated 748 million people worldwide still lacked access to safe water, so efforts must continue in water provision. Access to sanitation remains a more significant challenge for many countries, with an estimated 2.5 billion people still lacking adequate sanitation facilities – many of whom still practice open defecation.

Illnesses caused by poor sanitation and hygiene place a heavy economic burden upon individuals, families and governments due to the cost of healthcare and the loss of productivity. Lack of sanitation, contaminated water and poor hygiene practices contribute towards almost 90 per cent of child deaths from diarrhoeal diseases.

Our response

A common but adaptable approach for all Red Cross Red Crescent water and sanitation projects, promoting large-scale and long-term programming.

Over the past ten years, the International Federation of Red Cross and Red Crescent Societies (IFRC) and its members have significantly scaled-up delivery of longer-term water and sanitation programmes, providing equitable, affordable and sustainable solutions to help improve the health and quality of life of vulnerable communities.

GWSI supports the design and implementation of a common integrated approach, anchored on participatory and sustainable interventions. It aims to improve access to safe water and adequate sanitation, as well as supporting the application of good hygiene practices and community water management.

All GWSI projects meet the following criteria:

- **promote equity:** target vulnerable communities with significantly low water and sanitation coverage
- **sustainable technology:** use appropriate, afforda-

ble and sustainable technology options

- **projects at scale:** promote large, longer-term projects to achieve economies of scale and lower the cost-per-person
- **community engagement:** leverage community participation and invest in health and hygiene promotion
- **impact:** support greater, more measurable impact and clearly defined impact indicators
- **gender:** take gender issues in the planning and implementation process
- **alignment and integration:** align with government water and sanitation policies
- **environment:** ensure that technical options are environmentally sound.

Our Impact

Having reached more than 15 million people, GWSI has surpassed its initial goal of reaching 5 million people by 2015.

By December 2015, we have delivered water and sanitation services to more than 15 million people worldwide. We have also reached more than 6.5 million people with hygiene promotion activities and campaigns.

What remains

Sustained universal coverage requires more than capital inflows: financial and institutional strengthening is required to ensure that capital investments translate into effective service delivery.

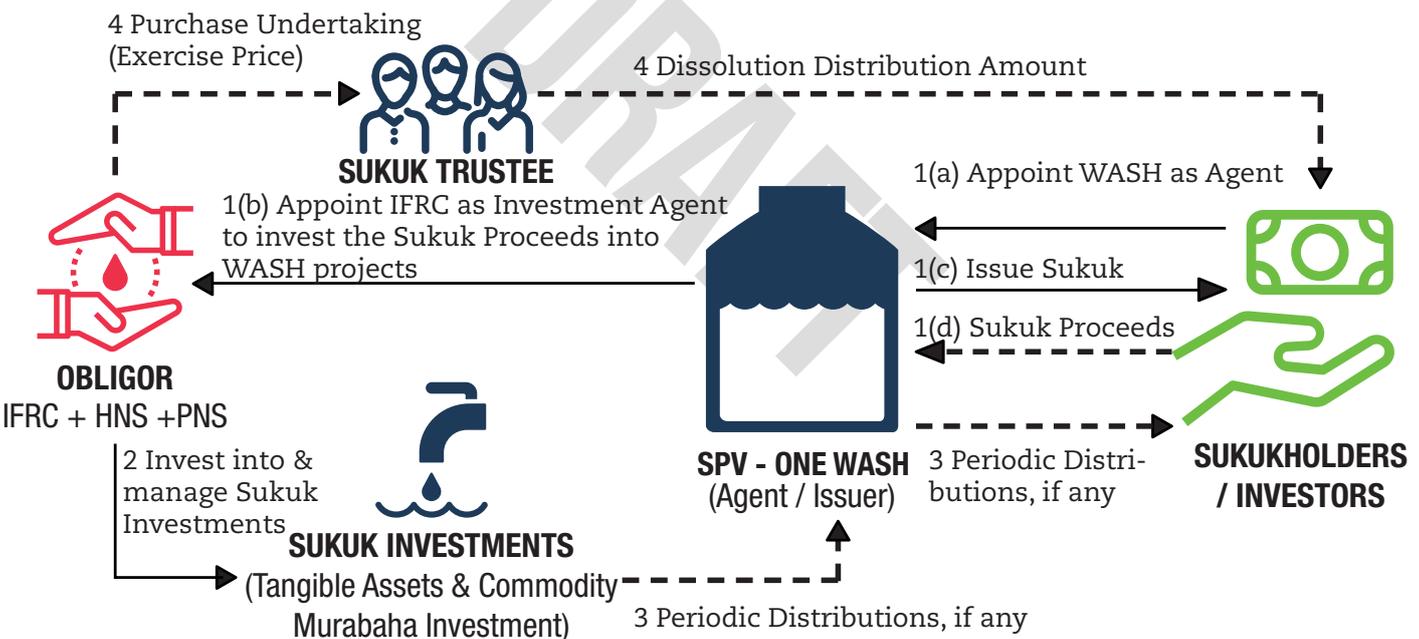
The global capital costs of achieving universal basic WASH by 2030, amount to **\$28.4 billion per year (range: \$13.8 to \$46.7 billion)**. Current allocations need to be redirected and there will need to be significantly greater spending on sanitation (accounting for 69% of the cost of basic universal WASH) and operations and maintenance, as well as in the most off-track countries which are mainly in sub-Saharan Africa and South Asia. But this isn't the full story.

Even while the MDG sanitation target was not met, a new global target was set as part of the SDGs. The targets and proposed indicators within the water goal (6.1 and 6.2) talk about 'safely managed' services, which includes continuously-available, on-plot water supply and an improved service chain to ensure safely managed faecal waste. When these additional services are costed, they amount to **approximately \$87 billion per year (range: \$61 to \$123 billion)**. Then, we needed to add the basic

sanitation and hygiene cost, as well as part of the basic water cost (as many households will not go direct to safely managed water). This takes the cost of achieving targets 6.1 and 6.2 to about \$114 billion per year (range: \$74 to \$116 billion). At **0.39% of the sum of gross domestic product (GDP) of the 140 included countries (range: 0.26 to 0.55%)**, \$114 billion per year requires an additional 0.27% of global GDP spent on WASH, hence requiring massive additional in-flows of financing to the sector.

Further, the people at risk or under threat from cholera is approximately 350 million globally (at least). Within that figure, it is estimated that one in ten do not have access to safe water and three in ten do not have access to sanitation. The Global Task Force for Cholera Control (GTFCC) road map proposes those people at most risk will be served by 2030. To provide what is needed to those people, the investment required is between USD 40 and 60 per person.

Phase one of the Federation’s WASH efforts covers



1. An investment agency agreement is signed between the Sukuk Trustee (on behalf of the investors (Sukukholders) and IFRC.
2. The Sukuk Trustee (on behalf of the Sukukholders) will appoint WASH to act as its agent (Wakeel) to invest the Sukuk Proceeds in WASH initiatives
3. WASH, in its capacity as Agent to the Sukukholders, shall appoint IFRC as the Investment Agent to invest the Sukuk Proceeds on behalf of the Sukukholders.
4. The Sukuk represents the Sukukholders’ undivided and proportionate beneficial interest in the trust

the next five years and proposes to meet the needs of 5 million people at a cost of USD 120 million i.e. USD 41 per person as the initial step forward. Phase one is ready for commencement, with the understanding that to reach a greater number of people by 2030, partners will need to increase engagement and expand their programming over time.

Therefore, as the funds required for delivering on SDG 6 may only be met partially from traditional bi- or multilateral aid sources, it is likely that increased investments may be accessed through more innovative and transformative forms of financing.

Islamic Funding Options, Sukuk Issuance for One WASH

Option 1 - Commodity-linked Social Impact Sukuk

Overview of Proposed Structure

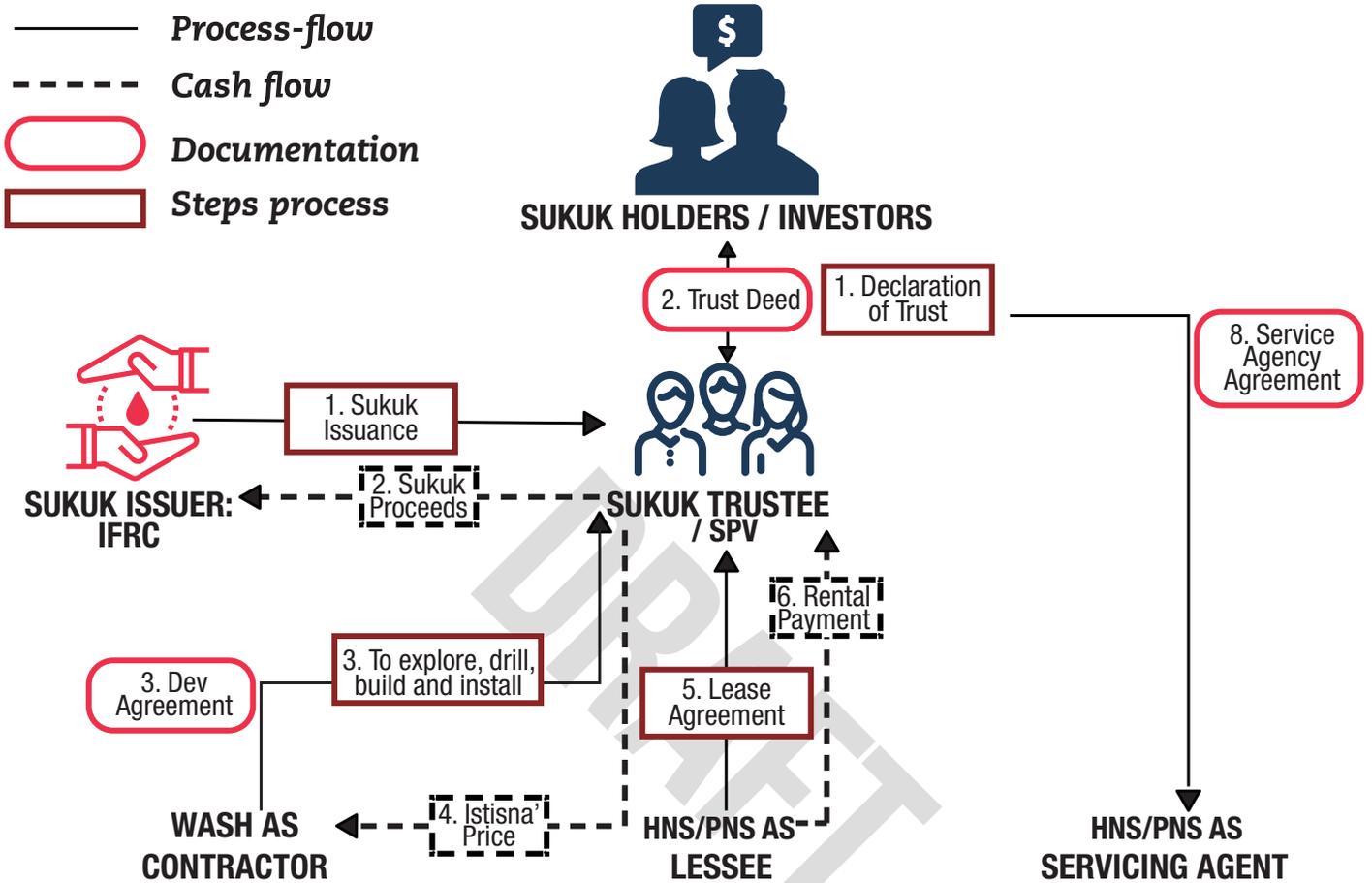
assets, comprising of the Sukuk Proceeds, underlying assets in the WASH initiatives including the rights, title, etc. (Trust Assets). The Investment Agent invests the Sukuk Proceeds into an investment portfolio that may comprise of:

- a. Shariah-compliant tangible assets. The Investment Agent may invest at least 30% of the Sukuk Proceeds into the Tangible Assets (Asset Purchase Price) at the point of initial investment; and
- b. Shariah-compliant commodities purchased and sold under the principle of Murabahah (Commodity Murabahah Investment).

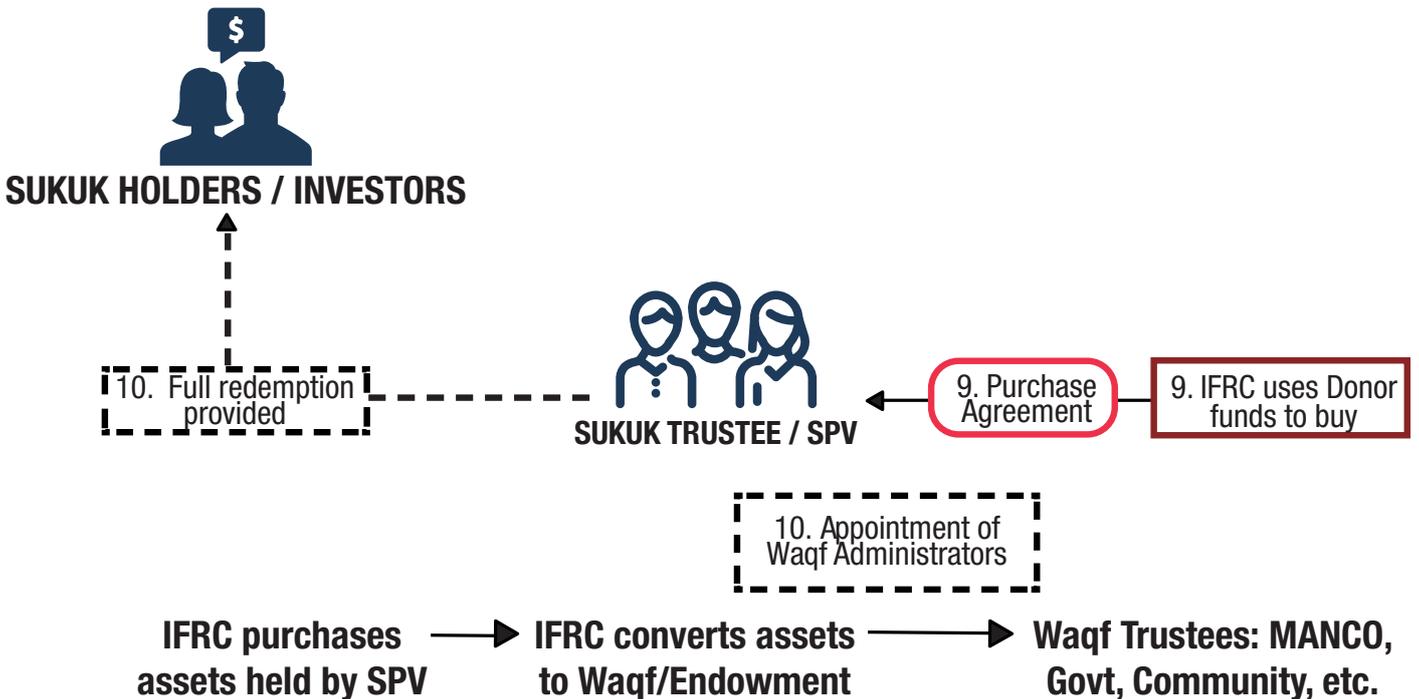
c. The proceeds from commodity investment (tawarruq) may be used for dividend distribution periodically

Option 2 - Convertible Social Impact Sukuk-Waqf

A) DURING LIFETIME OF PROJECT



B) AT MATURITY AND POST-MATURITY



Overview of proposed structure:

1. IFRC/ONEWASH (SPV) serve as the issuer for a combined Sukuk-Waqf model.
2. Proceeds from sukuk issuance are used by the SPV to purchase WASH 'hardware'.
3. The hardware (water treatment plants, infrastructure, boreholes, etc.) are rented out to national societies and partner national societies in identified hotspots. Rentals are paid through donor pledges and contributions from partners and stakeholders.
4. At maturity, assets return to the SPV.
5. The SPV as owner then converts the assets into Waqf assets by appointing local stakeholders (governments and societies where applicable) as the Trustees of the Waqf assets. The beneficiaries are the public.
6. In addition, it is proposed that immovable property, for example: commercial buildings, warehouses, and / or low-cost housing be financed through the Waqf via donor contributions that have come in from donor-investors (as in option 1). The assets may be rented out to create economic activity around the initial Waqf assets represented by the hardware. These rental proceeds may be used to maintain the hardware by creating a perpetual stream of funds for upgrade, maintenance, and long-term sustainability.

Primary Risks facing a Sukuk Issuance for One WASH (both options)

1. Underlying Assets & Cash Flow Generation

- Underlying assets do not generate any revenue
- Tangible assets or 'Hardware' consist of approximately 50% of total investment
- Costs fluctuate since
 - Areas differ in their accessibility to clean water sources, increasing exploration costs
 - Some areas require additional water treatment
 - Professionals are not always trustworthy to provide accurate cost estimates and might also be charge for services that were not rendered
 - There is potential for water contamination, requiring additional expenditure for purification
 - Vendor costs differ from area to area
 - Local community motivation and acceptance varies, increasing the costs of empowerment and skill

transfer

2. Tradability and liquidity of Sukuk

- Subscribers/Sukukholders require that Sukuk may be redeemed at any time, due to sudden shortages of liquidity in the market
- Therefore, it is necessary that the Sukuk issued must be tradable in the market
- This can be resolved using a tangible underlying asset model at a minimum of 30%

3. Impact measurement

There have been attempts at combining Shariah-compliant negative screens and the positive screens of SRI and ESG funds, although no benchmark index has surfaced as a reference as most have been theoretical in nature. This issuance promotes a practical approach to this blended screening, potentially offering a new benchmark and reference for future Societal impact Sukuk to be issued. Shariah screening primarily filters 'negative' or prohibited elements. The WASH projects follow a pre-determined set of key performance indicators (KPIs) that further facilitate a "positive" screening which have mandates on SRI (sustainable, responsible and impact investing) and the ESG or environmental, social and corporate governance criteria. Combined, and with specific adjustments, the new measurement index will promote Shariah-compliant, sustainable and responsible investing as well as compliance with the SDG 6 benchmarks. See appendix for the full set of KPIs (to be blended with Shariah screens).

Expected Impact

- a. It is expected that although financial risks arising from market and operational exposure exist, the strong track record of One WASH and our technical experience in actual implementation, will assist in managing and reducing these risks significantly.
- b. In addition, the unique approach to book building using profiled investors, is expected to diminish the burden of full capital pay-out at maturity.
- c. The significantly large impact on socio-economic development through accessible clean water and infrastructure for sanitation would potentially display a new paradigm in accessing humanitarian aid. As donors become more discerning and organizations apply further cost reduction mechanisms, ISF social impact bonds that apply a unique measurement index in a modified pay-for-success model may be a game-changer. And, all the partners (including the guarantor/s) will benefit from being the first movers and setting the stage for Islamic Finance to positively impact humanity and become mainstream.

Appendix 1

Proposed RC/RC SDG6 Impact and Performance Indicators Guidance Note with additional considerations and SDG links

Goal 6. Ensure availability and sustainable management of water and sanitation for all

RCRC Impact and Performance indicators unpacked.

Considerations and other SDG links

TARGETS	INDICATORS	IMPACT INDICATORS	PERFORMANCE INDICATORS	
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Percentage of population using safely managed drinking water services	<p>xx% increase of men, women and children in the target population having access to and using safely managed drinking water services at the end of project/operational period compared to the base line.</p> <p>Tested water quality, volume of water available per person and proximity to residence.</p>	<ul style="list-style-type: none"> • Scale of water supply intervention that has served men, women and children in relation to overall needs of the population from base line to end of the project/operational period. • Means and effectiveness of sustainability activities applied and degree to which project is functional & operational without external support. • Degree to which affordability and 'willingness to pay' is measurable and evident. 	<ul style="list-style-type: none"> • Consider access for people with disabilities and elderly as part of Equity and Inclusion. Link with Goal 4 Education and improvement of WASH facilities in schools. Link with Goal 3 Health and WASH at health facilities. • Monitor the functionality of the water supply system and set a Post Implementation Monitoring (PIM) at 3, 5, 10 years beyond project completion to enhance sustainable access to WASH services. Link to mobile technology use. • Specify free from pathogens/faecal contamination and chemical/mineral contamination (for example arsenic and fluoride).

RCRC Impact and Performance indicators unpacked.

Considerations and other SDG links

TARGETS	INDICATORS	IMPACT INDICATORS	PERFORMANCE INDICATORS	
6.2 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	<p>6.2.1 Percentage of population using safely managed sanitation services, including a hand-washing facility with soap and water</p> <p>6.2.2: Percentage of population with handwashing facilities with soap and water at home (merged with indicator 6.2.1)</p>	<ul style="list-style-type: none"> • xx% increase of men, women and children in the target population having access to and using safely managed sanitation services at the end of the project/operational period compared to the base line. • xx% of increase of men, women and children in the target population using handwashing facilities with soap and water at the end of the project/operational period compared to the base line. 	<ul style="list-style-type: none"> • Scale of sanitation intervention that has served men, women and children in relation to overall needs of the population from base line to end of the project/operational period. • Scale of provision of handwashing facilities in relation to the needs of the population from base line to end of project/operational period. • Degree to which affordability and 'willingness to pay' is measurable and evident. • Demonstrable safety, security and dignity for sanitation service users, men women and children. 	<ul style="list-style-type: none"> • As above include access for people with disabilities and elderly as part of Equity and Inclusion. • at a reasonable distance from the HH. In communal sanitation facilities, it is important to consider ratio of # of facilities and population and distance from HH. Reduce queuing and congestion. • Safely managed sanitation must ensure safe disposal, reuse or treatment of sludge and other effluents. • Link to Goal 4 Education and WASH in Schools. It would be good to add indicators when appropriate for G&D and MHM facilities for women and girls at household, school and health centre level. • Monitoring the presence of handwashing station with soap may be a proxy indicator for handwashing with soap.

RCRC Impact and Performance indicators unpacked. Considerations and other SDG links

TARGETS	INDICATORS	IMPACT INDICATORS	PERFORMANCE INDICATORS	
6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1 Percentage of wastewater safely treated 6.3.2 Percentage of bodies of water with good ambient water quality	<ul style="list-style-type: none"> • xx% increase in wastewater treatment at the end of the project/operational period compared to the base line. • XX% reduction in the degree to which pollution occurs by and from untreated wastewater. • XX% decrease of stagnant water around the targeted project area at the end of the project/operational period compared to the base line. • XX% of water sources/bodies checked for good ambient water quality in the target project areas regularly and stakeholders duly informed of results. 	<ul style="list-style-type: none"> • Scale of wastewater treatment component included in the implementation of WASH projects measured from base line to end of the project/operational period. • Degree to which stagnant pools and other surface water is reduced linked to means and effectiveness of clean up campaigns from base line to end of project/operational period. • Scale of awareness made through public campaigns on water pollution and hazards, treatment and safe disposal or usage of waste water from base line to end of project/operational period. 	<ul style="list-style-type: none"> • consider waste water disaggregated for household (both sewage and faecal sludge), agriculture and industrial activities. Inclusion of question on disposal and transport. • It would be good to specify the minimum variables/parameters that defines good ambient water quality.

RCRC Impact and Performance indicators unpacked.

Considerations and other SDG links

TARGETS	INDICATORS	IMPACT INDICATORS	PERFORMANCE INDICATORS	
6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	<p>6.4.1 Percentage change in water use efficiency over time</p> <p>6.4.2 Percentage of total available water resources used, taking environmental water requirements into account (level of water stress)</p>	<ul style="list-style-type: none"> • XX% of change of water use efficiency at the end of project (with agriculture components and municipal sectors) compared to that of the baseline • XX% of change in water stress (water used/water availability) at the end of project cycle compared to that of the baseline (with agriculture components and municipal sectors) • XX% of projects included as Integrated water resources management (IWRM) and the average degree of integration in these projects (0-100) 	<ul style="list-style-type: none"> • Means and effectiveness of projects conducted with focus on water use efficiency, degree to which awareness and activities have increased from base line to end of project/operational period. • Means and effectiveness of projects with focus on measuring water stress and degree to which it has been reduced from base line to end of project/operational period. • Scale of information spread within the target project area and local authorities on water stress and its solutions from base line to end of project/operational period. 	<ul style="list-style-type: none"> • Consider disaggregated data for all the sectors: household, agriculture and industrial water use. In regard to efficiency it would also good to consider reduction of water losses.

RCRC Impact and Performance indicators unpacked.

Considerations and other SDG links

TARGETS	INDICATORS	IMPACT INDICATORS	PERFORMANCE INDICATORS	
6.5 By 2030, implement integrated water resources management at all levels, including through trans-boundary cooperation as appropriate	6.5.1 Degree of integrated water resources management implementation (0-100)	<ul style="list-style-type: none"> • XX% of projects included as Integrated water resources management (IWRM) and the average degree of integration in these projects (0-100) 	<ul style="list-style-type: none"> • Means and effectiveness of projects implemented as IWRM projects and the degree of integration (0-100) from base line to end of project/operational period. 	<ul style="list-style-type: none"> • Consider national policies that include IWRM. • Along with projects we should consider also the contribution of NS to support Government in developing policy and strategies for IWRM and related Implementation Plans, financing and monitoring frameworks.
6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	6.6.1 Percentage of change in the extent of water-related ecosystems over time	<ul style="list-style-type: none"> • XX% of projects with components to protect and restore water-related ecosystems. • XX% of change to the ecosystems during the project cycle 	<ul style="list-style-type: none"> • Means and effectiveness of projects including components to protect and restore water-related ecosystems from base line to end of project/operational period. • Scale of water sources and estimates of quantity of water used and restored in the project 	