External Review of the Social Water Entrepreneurship Portfolio of Projects

Mandated by the Global Programme Water (GPW)
of the Swiss Agency for Development and Collaboration (SDC)

Final Report

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Acronyms and abbreviations

BoP	Bottom of the Pyramid
DFI	Development Finance Institution
EAWAG	*Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz* (Swiss Federal Institute of Aquatic Science and Technology)
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit* (German development agency)
GPW	Global Programme Water
IDE	International Development Enterprises
RRR	Resource Recovery and Safe Reuse (RRR)
SBB	Swiss Bluetec Bridge
SDC	Swiss Agency for Development and Cooperation
SDG	Sustainable Development Goals
SE(s)	Social Entrepreneurs
SPP	Sanitation Safety Planning
SSWM	Sustainable Sanitation and Water Management (see cewas project)
SUSW	Scaling-up safe water project
SUPW	Scaling-up productive water project
SWE	Social Water Entrepreneur
YWF	Young Water Fellowship programme
YWS	Young Water Solutions

Executive Summary: Findings and Recommendations

For more than a decade, SDC's Global Programme Water (GPW) has engaged in supporting social water entrepreneurs (SWE) as a modality to contribute to achieving SDG 6, being one of the first development agencies to do so. This report provides an external review of GPW's portfolio of six projects supporting in one way or the other the development of social water entrepreneurs. The report assesses an overall portfolio of six projects, including four concluded projects and two ongoing ones (cewas Middle East programme, Young Water Fellowship programme) for which a deeper review has been conducted. Through document review and interviews with a range of stakeholders (implementing partners, social entrepreneurs, end beneficiaries, donors, investors), the review documents lessons learned on successful formats, further opportunities and develops strategic recommendations to the GPW on how to further engage in the space of social water entrepreneurship.

Project level

The cewas Middle East programme since 2016 provides incubation programme and business coaching for green entrepreneurs, raises the know-how and fosters the demand for sustainable sanitation and water management solutions, and since 2019 (phase II) also strengthens the entrepreneurial ecosystem in the four countries / regions of intervention (Jordan, Lebanon, Palestine, North Iraq). The programme focuses on quality, tailor made business support and coaching, demand-based market testing without providing any seed funding. There have however been no tangible results at the level of formally integrating entrepreneurship into national water sector strategies or policies. The relevance of SWE to innovate the large public water sector in these four countries is also unclear and ties between utilities, public authorities and entrepreneurs inexistant or informal at best. Beyond 2021, cewas Middle East intends to focus on technical assistance in ideation and acceleration of green entrepreneurs, developing local actors' capabilities, and creating strong ecosystems that can effectively support green entrepreneurs.

The Young Water Fellowship programme provides business training and some seed funding to selected young SWE in different regions. The programme seeks to empower young people as actors of change able to provide locally sourced solutions to solve pressing WASH issues. The programme has created opportunities for young entrepreneurs who traditionally would not have access to those resources and has created notable impact in their lives and at the level of communities. It is however difficult to reconciliate the objective of creating financially sustainable and impactful businesses with the objective of empowering youth. The grant as a financial mechanism seems to have provided a necessary head start to some of the projects but can create a perverse effect of encouraging fellows to look for more grant funding instead of investing time into establishing product-market fit and diversifying revenue streams. Results at policy level are weak so far, and in general there was not a needs-based analysis as to where to establish the regional and national editions. Rooting the programme in local entrepreneurial systems more strongly could support SWE in developing the necessary relationships to the business community and to the public sector.

Portfolio level

The portfolio of social water entrepreneurship projects was not intentionally established over the years but rather reflects the retrospective realization that GPW has engaged in thematically similar projects over the years. These projects however are heterogenous in terms of overall goals, intended outcomes and implementing partners. The projects are pursuing a wide array of impact-level goals, namely creating sustainable social enterprises, empowering youth, creating job opportunities, strengthening circular economy, or improving health protocols around sludge management. In one way or the other, all projects experimented with different approaches to initiate, incubate and accelerate business models around water and sanitation services, wastewater treatment, efficient water use or water for food (irrigation) and/or to build up and strengthen their entrepreneurial ecosystem.

The project portfolio was built by a mix of programmatic co-funding and project-based technical assistance mandates with a total amount of CHF 25 million. Most projects supported have achieved the outputs that were intended, but this not always translated into the realization of higher-level project goals.

GPW's assumption is that SWE are complementary partners to reach SDG 6. The six projects show that the collaborations were started without evidence that SWE *are* part of the solution of water-related issues at hand in the countries of intervention. That means that the primary target group was based on an assumption not an evidenced need.

The review finds that less than a dozen SWE supported through the projects have provided WASH solutions for millions of end beneficiaries, raised follow-on investments and created numerous quality job opportunities. And that very few SWE supported through the different projects are sustainable or creating large-scale social or environmental impact. The large majority of supported SWE however have not reached a scale with relevant impact and financial viability.

Few projects engaged intensively with their local ecosystems, which hampers potential for systematic and lasting effects. Most of the projects did not develop strong ties with local, regional or national authorities nor did they influence sectorial strategies and policies. In general, the implementing partners did not have the necessary capabilities nor resources to do so. While this has helped to create some autonomy in a sector with strong interlinkages to public authorities, it also questions how long the newly created SWE can operate without those ties.

Objectives pursued and work modalities have been very different in all six projects of the portfolio, with mixed results in terms of relevance, effectiveness, efficiency, sustainability, and impact. There is not a single recipe, and each modality of implementation needs to be deeply rooted in local contexts and needs. GPW has also focused mostly on ideation and incubation efforts, which takes a long time and requires a large amount of resources. It is also high risk, and few of the SWE can effectively grow, scale, and create more access to water and sanitation for all.

Recommendations at portfolio level

For going forward, we present a set of recommendations for SDC to engage further in this space, both strategically and operationally.

Strategically, to create a more stringent portfolio, the first step for GPW is to i) clarify the set of objectives to be pursued and to reflect on the expected impact created by the SWE at the level of end-beneficiaries, ii) clarify the primary target groups to benefit from the interventions and their expected changes in behaviour.

GPW has mostly focused on supporting enterprises at the phases of ideation and incubation, which is high risk and time and resources intensive. Going forward, GPW should put a strong focus on the acceleration stage, to build upon efforts and successes of the last projects. We also find that a gap exists for SWEs to find resources, both in terms of support and funding, post-incubation phase. GPW could support to fill this gap.

When evaluating how to structure the acceleration efforts, we advocate for more targeted efforts in fewer companies and in fewer geographies. GPW should seek to focus on a few countries or clusters of countries, understand the full panorama of challenges and actors, and support more targeted acceleration efforts there. In particular, it is paramount that GPW couples acceleration efforts with building a network of investors in this space, as they are rare at this moment and need to be further convinced of the attractivity of investing into WASH. Acceleration efforts could focus on some companies already supported in previous phases; or could shift towards supporting SME or family businesses that have been established for decades in some locations and help those grow and scale their impact.

However, growing companies to deliver a large impact would range in millions of CHF. The sole funding of GPW would not be sufficient to reach a relevant impact. Ideally, in the medium to long-term, we recommend GPW to become an anchor investor in a fund set up to support systemic solutions that provide safer and more inclusive access to water and sanitation. This will allow to bring stronger investment capabilities and targeted technical assistance to selected companies over a longer period of time (7 to 15 years), and the fund manager will work towards raising additional funding from other donors and private investors, therefore providing a catalytic use of SDC funds.

Further, more operational recommendations include:

- Focus on specific geographic zones i.e., countries or clusters of countries to ensure a sufficient effect on the entrepreneurial ecosystem including the government and the actual market. Locality matters.
- Favor modalities that seek to leverage local solutions to address the access gaps for the most marginalized and underserved communities.
- Strengthen evaluation phase (due diligence) to offer financial mechanisms/instruments suiting the purpose of each company or interventions.
- Seek synergies with other donors and funders.
- Build ties with the impact investing community: a key objective of previous projects was to leverage follow-on investment; however, the community of impact investors active in WASH is small. A focal point could be to map the landscape of active investors in this space and their key focus and look how to integrate these actors in the projects that are supporting social entrepreneurs.
- Partner with structures that can demonstrate know-how and a proven track-record on social enterprises acceleration, ideally in the WASH sector.
- Ensure impact measurement capabilities, both at implementing partners and entrepreneur level, and the regular reporting of impact metrics as well as business performance indicators from the SWE.

1. Introduction and background

SDC's Global Programme Water (GPW) over the last years has been supporting the acceleration of the implementation of Sustainable Development Goal (SDG) 6 by promoting and developing innovative solutions for valuing water, sustainable financing, technologies, sustainable service delivery and water management models, in line with its previous Strategic Framework 2017 to 2020, Component 2 "Water Solutions".

For this purpose, the GPW over the last decade has engaged with several implementing partners to accelerate the sustainable access to safe water and sanitation through the promotion of Social Water Entrepreneurs (SWE).

Although not intentionally designed as such, over the years a portfolio of six projects, most of them with multiple phases, has been established by the GPW with such elements of social water entrepreneurship. Table 1 provides an overview of the Social Water Entrepreneurship portfolio of projects with an approximate total of CHF 25 million of dedicated investments between 2012 and today.

Name	Partner	Phase	Status	Dates	SDC's contribution (in million CHF)
Fostering regional entrepreneurial and market development for SSWM in the Middle East (cewas Middle East Programme)	cewas	Phase I	Completed	Apr 2016 - Dec 2018	0.77
		Phase II	On-going	Jan 2019 - Dec 2021	1.66
Young Water Fellowship (YWF) Programme	Young Water Solutions	N/A	On-going	May 2018 - Oct 2021	0.52
Swiss Bluetec Bridge (SBB)	Strategos SA	Phase I	Completed	Nov 2012 – Dec 2015	1.58
		Phase II	Completed	May 2016 – Dec 2019	2.34
	FinanceContact	Phase III	On-going	Jan 2021 – Dec 2013	N/A
Implementing Resource Recovery and Safe Reuse (RRR) Business Models	GIZ and EAWAG	Phase I	Completed	2012 – 2015 (Lima) Dec 2011 – 2014 (Kampala)	3.25
		Phase II	Completed	Aug 2016 - Jun 2018 (Lima) Jun 2015 – Mar 2020 (Kampala)	3.34
Scaling-up safe water (SUSW)	Antenna Foundation	Phase I	Completed	Nov 2009 - Oct 2013	N/A
		Phase II		Mar 2015 - Aug 2018	1.57
Scaling-up productive water (SUPW)	Internal Development Enterprises	Phase I	Completed	Nov 2009 - Oct 2013	5.80
		Phase II		Nov 2013 - Dec 2017	4.50
				TOTAL SWE PORTFOLIO	**25.33***

*Table 1 Overview of the Social Water Entrepreneurship Portfolio (2009 to present; * for phase III in the SBB and for phase I of the SUSW project no budget figures are available for the moment)*

The GPW defines Social Entrepreneurship as formal or informal entities delivering market-based activities in water, sanitation and hygiene as well as related areas such as irrigation, climate protection/adaptation or hydroelectricity. The entities can cover a wide typology, from impact-driven businesses to not-for-profit organisations with business revenue.[1] The activities can include (but are not limited to) providing *operational services* (e.g., collection, treatment, distribution, etc.), *building infrastructure services* (e.g., drilling, mini-grid, treatment plants, sanitation facilities, etc.) or *develop, market, sale and distribute products* (e.g., filters, water purification devices, pumps, etc.).

According to the GPW, the underpinning rationale of these engagements is that SWE are important agents and to i) close the persistent gaps in achieving SDG 6 with innovative services and products complementing traditional water and sanitation service modalities, and ii) promote the human rights to water and sanitation defined by availability, quality, acceptability, accessibility, affordability and the principles of non-discrimination and equality. While it is GPW's ambition to experiment and expand on Private Sector Engagement formats (blended finance), the GPW wants to support social entrepreneurship as a *complementary* solution towards achieving the human rights to water and sanitation, meaning *complementary to traditional and existing actors and organizations* active in the provision of operational or infrastructural services and products in the field of water, sanitation, and hygiene.[2]

The rationale for engaging with social water entrepreneurs to tackle WASH challenges gained traction around 10 years ago as a response to persistent WASH challenges as well as the assumption that tackling them requires a stronger private sector role in WASH. It is an approach which was discussed and advocated for by IFIs (such as the World Bank, USAID or SDC) and through the related policy and knowledge network events such as the World Water Council or the Stockholm Water Week.

By promoting SWE in the water space, the GPW is trying to tackle a both pressing but also a complex challenge. This is illustrated by two important context factors:

- *Developing business models for the Bottom of the Pyramid is particularly challenging*: there are few investors that offer patient capital with a high-risk tolerance and accepting below market returns. Development agencies are therefore trying to fill this gap, acting as a risk-bearer, and working towards proving the business cases to create the conditions for more traditional investors to step in.
- *Virtually all national WASH sectors globally have a strong public sector focus (at times: rather interference) in terms of regulation, service provision and investments:* the strong public regulation of water and sanitation services (e.g. water quality standards, service provision modalities, tariffing), the multiplicity of stakeholders involved at national, sub-national and municipal levels, the political interests and power often inherent to water governance structures and institutions, the often highly regulated product (i.e. water quality) are just a few typical features. In addition, water is not merely a private good and is linked with many other values such as religious beliefs or local cultural and historic identity. All these factors contribute to the *private sector being cautious to enter the WASH market*.

The promotion of social water entrepreneurship is also embedded in a wider trend in development cooperation (and linked to SDG 17 "Partnerships for the Goals") where grant mechanisms are no longer regarded as the only financing mechanism. There is greater scrutiny in the use of public funds and an overall objective that those resources are catalytic, i.e., to build confidence and incentivize other donors and funders to support the same efforts, with the final goal of creating the greater impact on end beneficiaries and ecosystems. In the context of Swiss development cooperation, this trend is visible since the last Dispatch on International Cooperation 2017-2020 and has been emphasized on SDC's side with establishing a Competence Centre for engaging with the Private Sector (CEP) in 2017 and with publishing its Guiding Principles and Handbook for Engagement with the Private Sector in January 2021.

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[1] GPW's current Strategic Framework 2021 to 2024. Weblink: https://www.shareweb.ch/site/Water/resources/Documents/GPW_Water_2021-24.pdf

[2] GPW's current Strategic Framework 2021 to 2024. Page 45.

2. Objectives and methodology

2.1 Purpose and objective

The **purpose** of this external review is to understand the overall achievements of the 6 portfolio projects with regards to delivering the GPW Strategic Framework and to develop lessons learnt and strategic recommendations relevant for the GPW to decide on its future engagement in the field of Social Water Entrepreneurship (SWE) under the current GPW Strategic Framework 2021 to 2024.

The **objectives** and therefore the main elements of this report are :

i) Review of the two ongoing projects (the cewas Middle East Programme and the YWF Programme) individually based on review questions structured along the criteria relevance, effectiveness, efficiency, impact/sustainability and partnerships

ii) Review of all six projects at the portfolio level with a focus on relevance, lessons learnt, upscaling potential and strategic recommendations

iii) Provide lessons learned and develop strategic recommendations, in particular on the future programmes' design including the pertinence of continued collaboration with some partners, the risks and uncertainties of future phases as well as provide insights on the results of the blended finance approach and how they can be incorporated in the design of future SWE projects.

In this *Final Review Report* we present the six projects (chapter 3) and the methodology (chapter 4), document the findings, our analysis and conclusions with regards to the review questions (chapter 5) as well as the lessons learnt and strategic recommendations (chapter 6).

2.2 General approach of the review

The review was conducted between January and April 2021.

- In the first phase of the review, based on interviews with SDC project managers and structured review of project documentation and literature, the team developed for each project working hypotheses and questions to further explore in the review process. They were documented in the *Interim Report* and discussed with the GPW team.
- In the second phase, the review team conducted interviews with a sample of project-internal and project-external stakeholders for each of the six projects, extended the document review, and consolidated the findings through an analysis and reflection process in the review team. The findings and recommendations are documented in this *Review Report* and discussed with the GPW team.

2.3 Review questions and results chain logic

The review is guided by the project level review questions (see chapter 7.3) and the portfolio level review questions (see chapter 7.4).

The project's development effects are assessed along the results chain logic, mainly focusing on the project's output and outcome level:

- The **output level** assesses how and at what quality the projects have delivered their project outputs, such as trainings, reports, financing tools, networking, events with the ecosystem, etc.

  Key questions: Were trainings and coaching for SWE need-based and effective? Were events with the decision-makers conducted and with what quality?

- The **outcome level** focuses on the changes in behaviour among the direct target groups, in the majority of cases these are the SWE or supply chain actors.

Key questions: Is the business model viable and financially sustainable? What amount of funds have been raised beyond the project? How many new jobs have been created?

The **impact level** focus on the effects at the level of end-beneficiaries (or also more general targets like the environment, cultural, socio-economic system) are explored only in a minimal way due to time and data constraints. *Key questions*: How many customers have been served? How many customers were provided with new or improved access to water or sanitation? What is the socio-economic status of the customers served?

2.4 Methods

For the 4 completed projects (portfolio level) and the 2 ongoing projects (project level), the review team applied a separate set of methods with a clear focus of resources on the 2 ongoing projects.

The following main methods have been applied:

1. **Review of relevant documentation** related to all 6 individual projects (ProDoc, logframes, credit proposals, and their respective updates; end report, external reviews for those projects that have been closed already), as well as regarding SDC's and the GPW's overall strategy. Where appropriate, additional literature was searched and analyzed. The complete list can be found in chapter 7.2.
2. **Short introductions** to each project by the 6 project managers at the GPW, providing advice on relevant resources person, further people to interview and important aspects relevant for the review.
3. **Explorative interviews with the implementing partners from cewas and YWF** to discuss logistics, agree on focus geographies and identify relevant stakeholders for the interviews.
4. **Semi-structured, individual interviews** based on a questionnaire along the review questions (videoconference calls) with a meaningful sample of relevant stakeholders, namely:
    - Implementing partner of all six projects
    - Project beneficiaries such as SWE, incubators as well as ecosystem partners involved in project implementation
    - A small set of customers of SWE to analyze i) the quality perception of the service / product, and ii) the effect of the service / product in the three pillars of sustainability
    - A small set of experts partly or not involved in the programmes or projects who provided contextual information

    Interviews were all virtual due to the COVID-19 pandemic restrictions and were conducted by at least two review team members, often more. The review was conducted in French and English, a few interviews in the Arab region were translated from Arabic to English.
5. Review team **internal workshop** for reviewing, structuring and consolidation of findings and subsequent development of strategic recommendations.

Quality of method and documentation was assured by the two senior experts in the team.

3. Review findings: cewas Middle East programme

3.1 Relevance

The project's intervention logic focuses on a comprehensive incubation programme and demand creation, less but increasingly also in strengthening local incubation partners, namely INJAZ in Jordan or PPU Hebron in Palestine. Engagement in national and regional policy dialogue (through Blue Peace initiative) which goes beyond direct entrepreneurial support is not a priority.

Programme design strongly reflects a needs-based approach as it is mobilizing and empowering green entrepreneurial spirit, rooted in the community's everyday experiences and needs; shift from "blue" to "green" entrepreneurs is opportunity-driven; no evidence found that this commercial approach competes with the public sector; the link with large private sector companies (e.g. water utilities) and adding to their innovation is missing.

The programme tailored their enrollment criteria to be gender sensitive and inclusive also for entrepreneurs without resources, however the profile of entrepreneurs interviewed suggests that only a few originate from vulnerable communities (e.g. Palestinian refugees in Jordan).

Benefits for end-beneficiaries: benefits for vulnerable communities (customers) are evidenced by some of the SWE products and services but it is just one of several priorities set by cewas.

The programme's objectives are relevant as it targets pressing environmental needs in the region establishes an ecosystem network relevant for stimulating SWE. Although it is bottom-up in its approach to engage with entrepreneurs, the paradigm that entrepreneurship promotion is a relevant solution to resolve the water-related challenges in the region remains an assumption. Cewas' approach is in line but not necessary reflected in national sector strategies. (Q1 and Q5)

The region is the most water scarce region of the world, with about 6% of world's population having access to 2% of the world's renewable fresh water and with 12 of the world's most water scarce countries.[3] The efficient water use, quality of water resources and access to reliable and affordable water and sanitation services (all SDG 6 related challenges) continue to exist in all four countries/ regions. UNICEF and WHO estimated 52 million people here lacked access to an improved water source before 2010, and since then, conflicts have left many more needing humanitarian assistance.[4] Also, there are large disparities within the countries in terms of desirable WASH service levels. This data illustrates the clear need to further invest in the region's water sector.

The **needs-orientation** of the programme is **ambivalent**:

- On one side, the programme design strongly reflects a needs-based approach as it is mobilizing and empowering green entrepreneurial spirit from bottom-up, rooted in the community's everyday experiences and needs.
- On the other side, the paradigm that entrepreneurship promotion is a relevant solution to resolve the water-related challenges in these countries and region is a (top-down) assumption without being rooted formally in a need assessment process at national or regional level (e.g., through strategy or policy making processes).

The design of the current phase II is different in the four countries/regions, but the core approach is the delivery of a **comprehensive incubation programme** including training, coaching, network matchmaking for promising green social entrepreneurs, complemented with demand creation, awareness raising, SSWM training and ecosystem engagement activities.

[3] See: Unicef, weblink: https://www.unicef.org/mena/wash
[4] See: IIED et al. (2017): Supporting water ser vice providers during conflicts. Weblink: https://pubs.iied.org/sites/default/files/pdfs/migrate/17425IIED.pdf

The programme is well designed in its attempt to **stimulate demand** for the entrepreneurial approach and to provide **technical trainings** on sanitation and water management solutions, to promote consumer awareness, or on the economic rationale of decentralized water and sanitation systems (SSWM toolbox, eCompendium). In both business model development and demand creation, the programme has built on a **network** of actors and positioned itself as a strong, reliable partner for the SEs as well as for national incubation partners, such as INJAZ in Jordan.

The socio-economic and political **culture** toward SWE is different per country: Lebanon traditionally has a vibrant business space and with the economic and political crisis, society is even more susceptible for community-driven and private initiatives and services while the trust in public services is further eroding. Jordan has a stronger central state orientation with strong public institutions in the public (water) sector.

The relevant sectorial **policies, strategies and instruments** established in the water and environmental sector neither stimulate nor hamper the development of social entrepreneurs. The entrepreneurs interviewed in Jordan and Lebanon know very little about it. They emphasize the relevance of cewas' work on networking with the ecosystem, but also confirm that a **structured formal engagement** by the cewas programme to shape these sectorial regulatory framework conditions **is missing**. Very recently (March 2021), cewas in Jordan has facilitated engagement between the Green Entrepreneurship Network and the Ministry of Digital Economy and Entrepreneurship (MODEE) to discuss areas of cooperation.[5]

The project's result chain logic and the resources employed were ambitious and well-designed, tailored to capitalize on cewas' organizational experience and to meet the set objectives. Partner relations were well developed over time. (Q2, Q3, and Q4)

Particularly positive aspects of the **programme design** mentioned during interviews were:

- The thorough training and coaching, especially also support for the entrepreneurs in the post-incubation phase
- The incubation programme curriculum, the training settings, teaching methods and field trips allowing to analyze a concrete challenge on the ground and learn to transfer it into a possible business idea as well as the events & platforms to convene with coaches and business angels
- The excellent matching and networking skills with national or regional scientific and financial experts

This shows that the programme's focus is not only on the incubation programme (outcome 3 in phase II) but also on the ecosystem and demand creation, contributing to the programme's **systemic approach** (in phase II) and the ambition to transpose cewas' background as an incubator in Switzerland into the MENA region.

The programme's phase I started off with a large list of potential **partners**, both institutional as well as individual experts which were consolidated by cewas over time into the different working arrangements (mentor networking, ecosystem events, incubating partnerships). With phase II, cewas has started to focus on **capacity strengthening** in Jordan and Palestine (INJAZ and PPU Hebron). It is not doing so in Lebanon as there is no imminent need as there already are green incubators operating; nor in Northern Iraq as the ecosystem seems to be in its infancy and no local partner could be found yet to start setting up an incubator. In Northern Iraq cewas started with capacity building and first initiatives e.g. PPP on sludge treatment and reuse.

The programme's relevance compared to GPW's core values[6] of gender-sensitive and the focus on vulnerable communities is partly explicit (admission criteria), partly rather an implicit result of the business models promoted. (Q6 and Q25)

[5] Based on written communication by cewas, 19 April 2021.

[6] As the core values we focused only on the question of gender-sensitivity of the approach as well as the extent to which the program is targeting vulnerable societal groups.

Cewas purposefully tailored their **enrollment criteria** for the incubation programme, the trainings, and informational events to be gender sensitive and inclusive. This allowed also for entrepreneurs without or with little personal resources to join, although a certain bias remains in terms of access (limited outreach, access to information by poor communities). Incubation training was free of charge i.e. there are no financial entry barriers.

On a programmatic level, cewas states they apply a **human rights based approach** in various ways, through i) the selection of entrepreneurs and target markets i.e. inclusion or marginalized or vulnerable groups, ii) the entrepreneurial support mechanism (focus and topics discussed during field visits and in community dialogues, a human-centered design approach, know-how transfer on impact measurement and iii) through the outcome and process monitoring and evaluation of indicators related to gender, disadvantaged people applied by cewas programme team.

Cewas **monitoring data** shows that 13 of 41 entrepreneurs who joined the incubation programme in 2019 and 2020 are female (31%). No income data is available from the entrepreneurs, at least one is from a Palestinian camp in Jordan – a societal group which is known for its limited access to social services and formal employment opportunities.

Both **incubation partners** in Jordan and Palestine points out that they are open to both genders and want to be inclusive. INJAZ stated this to be one of their core values. To what extent this is reflected in actual admission and support could not be verified and will have to be monitored in the coming years.

Although there are clear examples of a) serving the BoP as customers and b) benefitting the population including (and even proportionally more) vulnerable communities (see chapter 3.4), these effects are partly also an **implicit result** or a **genuine effect** of some of the business models as the focus on vulnerable communities is just one of several priorities set by cewas.

Also, there is **limited analytical work by cewas** put into unraveling the cause-effect relations and to verify the socio-economic and environmental impact of their SWE – not even at case study basis.

3.2 Effectiveness and Efficiency

cewas Middle East has started in the right place at the right time. They have established a relatively strong network in the region over a short period and delivered largely on the foreseen outputs as well as outcome indicators.

Their incubation programme is seen as of high quality i.e. thorough, structured and with a focus on strategic business advise for the entrepreneurs. Cewas is described as outstanding. Trainings were described as of high value; tools and methods, training approach are adequate; personal relations with cewas staff are praised by entrepreneurs, also providing the necessary mental support.

The cost-effectiveness of the programme (annual turnover of the entrepreneurs supported by cewas divided by SDC's financial contribution) suggests factor 2 between SDC contribution and SWE annual revenue with considerable uncertainty as detailed data is missing.

Through the engagement in their ecosystem on (impact) financing, knowledge brokering and networks strengthening, the programme has contributed to a conducive context for green entrepreneurs. However, as there are no tangible results in terms of influencing a regulatory process or developing policy papers, the level of institutionalization remains a weak point to be further addressed with more vigour.

In terms of efficiency, SDC's co-funding contributes to efficient use of funds and own investments (as compared to a mandate financing) and through the strong networking approach by cewas, potential synergies were systematically explored and used.

The programme has largely delivered on the foreseen outputs as well as outcome indicators stated in the ProDoc and M&E plan.[7] (Q7)

In phase I (2016 to 2018), the programme managed to connect the WASH and entrepreneurship communities, initiated support networks for entrepreneurs, provided SSWM trainings to NGO or university staff (Lebanon) and public servants (Iraq), and identified potential WASH product and service markets. Four year-long start-up training programmes were run, 2 in Jordan and 1 in Lebanon and 1 in Palestine. The programme trained and created 63 start-ups (target: 60) and created 187 employment opportunities (Lebanon 17 start-ups, Jordan 30, Palestine 15). Overall, almost all targets were met.

In phase II (2019 to 2021) up to September 2020, the programme completed one **1-year start-up programme in Lebanon** with 14 SSWM start-ups and one **1-year start-up programme in Jordan** with 13 SSWM start-ups. In Palestine, a training module with at least 20 entrepreneurs was conducted between July and September 2020. Beyond these trainings, the programme organized informational events or hackathons for university students or networking events, in partnership with ecosystem partners. Also, the programme provided strategic business development coaching to 21 established start-up teams (7 from Lebanon), (4 from Palestine), (7 from Jordan), (3 from Iraq).

A total of 355 SSWM entrepreneurs have been empowered. 48% of the capacitated start-ups are female led, and 50% of start-ups are targeting vulnerable populations as beneficiaries, customers or employees.

10 start-up teams are engaged in developing innovative solutions on a regional level (Difaf, IGT, Flowless, LLR, Compost Baladi, Mukafeh Al Zebar, Groasis Waterboxx, Clean2O, Namliyeh, Darb).

According to cewas reporting, up to September 2020, 21'000 end-customers (target: 10’000) paid for products and services of cewas start-ups *or* actively supported their sustainable businesses. The calculation method of this figure is not documented in cewas’ reporting.

Overall, phase II seems to be generally on track, with realistic targets probably to be achieved in phase II.

The know-how transfer, tools and methods and overall approach to support entrepreneurs is of high quality and based on and largely meeting the entrepreneur’s needs and expectations. (Q8, Q9 and Q11)

The cewas 1-year incubation trainings include two phases:

- First 6 months: training / coaching phase with about 20 training days, plus field trips and events
- Second 6 months: strategic business coaching, matchmaking, mentor meetings, fundraising support with foundations, NGOs or occasionally also impact investors

All interviewed entrepreneurs and training participants praised tools, methods and the excellent personal relationship with cewas programme staff. Events and incubation trainings were all provided free of charge.

Cewas conducts qualitative feedback discussions after each training module, uses an evaluation form after the main training phase, and conducts in-depth group feedback discussions after the programme ends. Knowledge uptake by participants on the short term is monitored through i) worksheets and assignments used throughout training modules and coaching, and ii) action and coaching plans used to provide guidance and measure progress.[8]

[7] Information in this section is based on M&E data received by the cewas team if not stated otherwise. Whether this M&E data is factually correct was not verified in the framework of this review.
[8] cewas, written communication, 19 April 2021.

Compared to other incubators, cewas incubation programme was described to be more **thorough and systemic** as compared to for instance those trainings provided by Shamal Start or INJAZ (through their own funds). Trainings were described as high-value, translated into local language (Arabic, partly Kurdish as needed). The Arabic version of the eCompendium was highly appreciated. One interviewee stated "it gave me a space to let my existing ideas flourish."

> *The profile of the five interviewed "cewas entrepreneurs"*
>
> The five entrepreneurs interviewed in Jordan and Lebanon are mostly well-educated, have partly studied abroad, and several already had exposure to business development or co-creation in their past. One interviewee supported developing another incubator in Lebanon a few years ago. One of the interviewed entrepreneurs is from a Palestinian refugee camp. None of the interviewed entrepreneurs were from very underprivileged parts of society. Two of the five entrepreneurs are women.

One strategic decision was to ***not provide*** **any direct financial support** to develop any product of service prototypes. Financial support up to a few thousand CHF was only paid for product or service marketing.

The programme has stimulated self-initiative and self-confidence of the entrepreneurs. **Personal relations** with cewas staff are praised by entrepreneurs, also providing the necessary mental support. In up to 30 cases (out of 100 programme participants), entrepreneurs and start-up employees succeeded to establish a successful own business and another 50 are generating initial revenues. For several this meant to move from unemployment to self-employment.

However, these achievements are fragile: Covid19 has delayed the process of developing businesses and many entrepreneurs may have lost momentum and focus on other opportunities. Further, market demand is often boosted by NGOs (and their procurement plans) which bears the risk of being a temporary demand.

The interviewed SWE mentioned two points considered to be **weak points** of the programme:

- The core cewas team was not tailored to challenge all the technical aspects or the scientific merit of products or services and referred to external experts for this. The focus was more on the entrepreneurial aspects in a broad sense.
- The SSWM toolkit was presented a bit early in the incubation training process. It would have been better to first focus on the "problem – context – solution" triangle and then start diving into the tools.

The review team also acknowledges that i) other SWE mentioned how cewas facilitated interactions with technical experts for specific technical questions, and ii) that the focus on business / commercial expertise in the cewas team also ensures that all SWE can be supported independent of their technical solution.

Comparing SDC's financial contribution with the annual turnover of the entrepreneurs (cost-effectiveness of the programme), rough estimate suggests a factor 2 between SDC contribution and SWE annual revenue with considerable uncertainty as detailed data is missing. Comparing it with the total leveraged funds, the ratio is 0.38 i.e., for CHF 1 of SDC contribution the supported entrepreneurs raised CHF 0.38 of funds (mainly grants). (Q11)

Annual turnover

According to the cewas team they have **worked with about 300 to 400 entrepreneurs**, of which about **100 entrepreneurs joined and completed the incubation programme**. Among these 100 start-ups, there are four rough segments in terms of revenue (detailed data is missing[9], only based on cewas' own estimation):

- 2 businesses with an annual turnover of around or more than USD 1 million

[9] cewas knows key business and financial data of the start-ups and enterprises they are working with over longer periods and are beyond incubation stage. However, they haven't started tracking business and financial data systematically across all supported entrepreneurs until 2020 when cewas started working on acceleration and scaling level. In the acceleration and scaling programmes they are now also employing enterprise diagnostic tools to collect that data. (cewas, written communication, 19 April 2021)

- 30 businesses with an annual turnover of more than USD 100’000 (many not yet profitable) and could go into acceleration stage at this moment (as they have organic growth and got other seed funding), have a core team of 4 to 6 persons on average, with some larger teams
- About 50 businesses at the level of minimum viable product (MVP) development stage and/or generating initial revenues
- Another 20 to 30 business are at ideation-prototyping stage, transitioning to MVP stage

Based on these rough estimates, the **total annual revenue of these blue / green social entrepreneurs** linked to the cewas programme are between USD 5 to 6 million. Compared to SDC’s overall co-funding of the cewas Middle East programme of CHF 2.58 million, the **annual revenue generated today is about factor 2**. It must be noted that the actual contribution of cewas to each of these start-ups is varying and not possible to specify.

Furthermore, it is **difficult to compare cewas’ performance with other incubators**, since there are many metrics to take into account to define an incubation programme as successful (number of incubated companies, funding raised, employment generation, successful exits, when looking at the start-ups; but also sustainability of the incubator, network and engagement and infrastructure). There is no data specific enough to compare to success rate of an incubator focused on WASH. As a general point of comparison, it is estimated that, in general, 90% of start-ups fail, although the most renowned incubator programmes (Y Combination, 500 start-ups, Techstars), that are sector-agnostic, tend to have substantially lower failure rate (20% in average) as they also are very selective in which entrepreneurs they admit to their programme (acceptance rate is 1 to 2%).[10] These incubators are well established, connected within the ecosystem and provide strong support to the entrepreneurs.

The employment opportunities are several hundreds, at the core team but as well in the supply chain (manufacturing) or value-added effects through increased consumption by these employees.

Leveraged funds

In phase I, the focus was on ideation and incubation, the exact figures were not monitored by cewas. Their estimate is about **USD 200’000 total leveraged funds** (5 start-ups received EUR 11’000 from Shamal Start; 15 start-ups received an average of USD 5’000 in small grants) for phase I.

In phase II, the **total leveraged funds are monitored with USD 793’000** (see **Fehler! Verweisquelle konnte nicht gefunden werden.** for the complete list). Although cewas is not monitoring numbers of leveraged funds systematically, they are in touch with the entrepreneurs and have a good idea of what they have received. In 2021 cewas expects these entrepreneurs to raise at least the same amount, which would then sum up to about USD 1’500’000 for the entire phase II. The large majority are grants.

One concrete example of how entrepreneurs mobilize resources is provided in Annex **Fehler! Verweisquelle konnte nicht gefunden werden.** (for the case of Sennara).

Compared to SDC’s overall co-funding of the cewas Middle East programme of CHF 2.58 million, it results in a **0.38 grant-leverage factor** i.e. for CHF 1 of SDC contribution the programme managed to mobilize through the supported entrepreneurs CHF 0.38 of funds (mainly grants).

In terms of efficiency, SDC’s co-funding contributes to efficient use of funds and own investments (as compared to a mandate financing) and through the strong networking approach by cewas potential synergies were systematically explored and used. (Q15, Q16 and Q17)

Several aspects have been taken into consideration during design, planning and implementation to ensure that resources are used efficiently.

[10] Desk research, as presented on the incubator’s websites or in specialized press (Entrepreneur; Forbes).

- **Choice of the intervention logic** reflects that the programme focused on **cewas' strengths** was best at, i.e. not to focus at the policy level but rather to go for outputs which are more within the sphere of influence of the project. The approach in Iraq seems also efficient, as it was designed as an entry step approach, with mainly capacity building and a few small interventions around fecal sludge disposal, to explore further potential on the go.
- **Co-funding** contributed to a more prudent use of funds overall. According to cewas this forced the entrepreneurs to invest themselves, to network, to engage with their context to "put a foot in the door".
- During implementation, the networking approach and by engaging with the whole range of actors contributed to explore and use **synergies across ecosystem actors.** Such partners include local and international institutions, such as Berytech, Chemonics Egypt, Orange Corners, ESCWA but also donors and impact investors and other incubation, business coaching actors.

The **direct costs** (excluding overheads) for start-up training in phase I are calculated at around CHF 8'000 per start-up[11] and **in phase II at about CHF 6'000 per start-up**.[12] Whether this is competitive with other similar programmes could not be verified. As the incubation programme and coaching were provided free of costs, a few participants were asked about their willingness to pay, however nobody was able to provide a concrete figure.

The satisfaction among customers of two start-ups (Compost Balladi in Lebanon, Sennara in Jordan) was excellent, and interviews showed a high acceptance for these two commercial ideas. In all cases the transactions were subsidized through grants hence no statement about economic viability can be deducted from this analysis. The specific impact could be verified only in the case of hydroponics where the economic return of selling greenhouse products is impressive. (Q12)

We interviewed three customers (end-beneficiaries) of two different start-ups (Compost Balladi in Lebanon, Sennara in Jordan). The detailed accounts are shown in Annex **Fehler! Verweisquelle konnte nicht gefunden werden.**.

The three interviews showed a **set of benefits** related to i) the socio-economic situation e.g. improved health status due to higher income from selling products (hydroponics) or when managing fecal sludge more properly, ii) the environmental condition (removing wastewater, cleaned surroundings to build hydroponics), iii) the self-confidence and self-esteem, possibly also increasing the social status within the community. In the case of Palestinian refugees, it offers a unique and otherwise scarce job opportunity.

However, as in all three cases the transactions were **subsidized** through grants (by 30% up to 100% subsidy) no statement about economic viability can be deducted from this analysis.

[11] According to ProDoc phase I, the original budget for the incubation programme (outcome 2) was EUR 364'000 for 45 start-ups which corresponds to EUR 8'100 per start up; after revision in January 2018, budget for 15 start-up incubation in Jordan was added, resulting into a budget increase to EUR 424'000 EUR for 60 start-ups. By the end of phase I, a total of 63 start-ups were trained. Thus, the **costs per start-up corresponds to EUR 6'730 (CHF 8'076) in phase I**.

[12] According to cewas, in phase II the total budget for position 3.2 is 737'529 CHF, which includes incubation/acceleration programmes as well as tailored, long-term coaching support for individual start-ups. For 2019 and 2020 cewas supported a total of 56 start-up teams through incubation/acceleration programmes and 40 start-up teams (different ones) with individual, tailored, long-term coaching support. Until April 2021, cewas supported 96 teams and expects to work with additional 30 teams in 2021, accumulating to a total of 126 start-up teams. This would equal a **cost per start-up of 5'853 CHF in phase II**.

3.3 Sustainability and Partnerships

Green incubation partners: INJAZ, PPU Hebron are reliable partner with clear potential to continue the "green" entrepreneur incubation programme; now receiving capacity building training by cewas

Formalization: Entrepreneurs are formalized as much as possible, receive legal advice

Scaling potential needs to be further proven: Scaling *could happen* through the incubation partners and network incl. involvement of impact investors, research and knowledge brokering

Partnership on policy dialogue: room for complementary partnership to engage in a more strategic policy dialogue, (formal) multi-stakeholder partnership

Through the engagement in their ecosystem on (impact) financing, knowledge brokering and networks strengthening, the programme has contributed to crafting a conducive context in Lebanon, Jordan and Palestine for green entrepreneurs to flourish, replicate and eventually scale-up[13] the achievements at the level of the entrepreneurs in the future. Post-cewas financing of the incubators is not yet clear. (Q13, Q18, Q20 and Q21)

According to the programme's theory of change, replication through growth of entrepreneurial activity is correlated with a solid yet vibrant entrepreneurial ecosystem for green entrepreneurs.[14]

The programme has from phase I invested in **strengthening the entrepreneurial ecosystem** – be it at the level of (impact) financing, knowledge brokering and networks strengthening. Now, two ecosystem networks on green business support institutions in Jordan and Lebanon are established with active contribution from and initiation by cewas; in 2020, a regional virtual workshop on impact investing in the water sector has been held with key financial partners. cewas focused on enhancing key partnerships with local and international institutions, such as Berytech, Chemonics Egypt, Orange Corners, ESCWA and selected university partners.

Another positive achievement to ensure sustainability are the **tools and methods** e.g. the toolset on "Marketable SSWM Business Models for the Middle East", the SSWM toolbox, investment readiness benchmarking tool which allow for readily application and use in any future blue or green incubation programme.

The incubators INJAZ and PPU Hebron have been established as trusted and reliable partners for cewas, first to host the green incubation programme, and in phase II with a stronger focus on their capacity development (co-facilitate, coaching). However, there is no clarity on how these **green incubators will be financially sustainable** (in case of PPU, the IsDB co-funded EcoPreneur programme is a promising but not necessarily lasting partnership). This is despite the overall developments over the last year that access for entrepreneurs have been made largely for free, today incubators sometime even attract entrepreneurs with seed funding to join their programme.[15]

The cewas ME programme has developed a **strategy beyond 2021** and outlined how cewas wants to shift its attention to "underdeveloped areas of the ecosystem" namely ideation, acceleration and scale-up. In the field of ecosystem development cewas aims at enabling other organisations to take the lead in water entrepreneurship ecosystem development activities. The cewas strategy beyond 2021 was not developed with partners but is based on cewas' own assessment of needs and their own strategic intentions.

Entrepreneurs are required to register their start-ups when joining the incubation programme. The transformation of already existing informal businesses into more formal enterprises is not a focus of the project (Q19)

[13] Replication and scale-up potential of the achievements is mainly analysed at the level of the entrepreneurs (not whether the programme approach in general can be replicated in other geographies).
[14] This theory of change has been studied in literature, see for a study from Netherlands: Stam, E., van de Ven, A. Entrepreneurial ecosystem elements. Small Bus Econ 56, 809–832 (2021). https://doi.org/10.1007/s11187-019-00270-6
[15] Based on interview with cewas, 18 February 2021.

All start-ups which benefited from the cewas incubation programme are required and also supported (e.g. legal advice, networking) by the programme. For instance, in Jordan, registration requires a lot, as SE need to register as both private companies and as NGOs as there is not appropriate legal framework.

cewas did not target already existing informal sector businesses (as it was for instance done in the RRR project in Kampala on fecal sludge emptier) to support them to evolve towards higher, formal standards e.g. through business coaching. This may be a missed opportunity but would also have meant a very different approach (different partnerships, different engagement with government authorities e.g. on quality standards and licensing, etc.)

The big number of possible partners defined in ProDoc phase I was narrowed down, opportunities to engage with partners were used, positive effects of the investments in partnerships begin to be visible. (Q27)

In phase I, a large number of country-level partners (implementing partners and additional partners) as well as the cewas ME think-tank / international pool of experts were listed, illustrating the scoping work had been done to enter the region. The partnerships were then consolidated and also adapted over the years, using windows of opportunity with new partners but also building on continuous support for some key partners, mainly the national incubators or the sewerage directorate of Erbil, North Iraq.

3.4 Impact

Within the sample of SWEs interviewed, improvements are seen around waste management and decentralized sanitation management, which naturally has a local, positive impact on the water resources, soil, air quality as well as health and hygiene. About 50% of all beneficiaries are from disadvantaged communities. For impact measurement, no consistent methodologies to measure / no data on SDG related indicators (access, water efficiency etc.)

For the project impact with regards to the entrepreneurial ecosystem, positive effects are observed at the level of the entrepreneurs and their *systemic conditions*, but with almost no effects at the *framework conditions.*

Information on impact is scarce and not collected in a systematic way. This bears the risk that the case for engaging with green entrepreneurs remains weak and hampering further or enhanced co-funding of the programme. Only a few business models directly target improved access to water and sanitation, with sanitation being a stronger focus. Cewas reports that about 50% of all beneficiaries are from disadvantaged communities. (Q22, Q23)

No consistent methodologies were so far introduced to measure impact on improved access to water and sanitation at the beneficiary level. The Impact Study[16] elaborating on impacts from phase I it is not clear what cewas' actual contribution was in developing these start-ups and to what extent success factors were ensured by cewas – the study mentions complex causality chains and remains qualitative. For selected communities or households there may have been improved access. cewas plans to survey impact in 2021.

In phase I, cewas reported that 46% of the businesses offer products and services to humanitarian NGOs or directly to refugee populations.[17] And the total beneficiaries of businesses supported in phase I was reported by cewas at 174'285 and the average per SWE was 5620.[18]

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[16] H. Beutler and J. Hermann-Friede (2019): Creating Impact with Water Entrepreneurship. cewas Middle East programme.

[17] Final Programme Report, Phase I, 2016 to 2018.

[18] Final Programme Report, Phase I, 2016 to 2018. The report also points at the fact that the term beneficiary and how it is calculated is understood differently depending on entrepreneur and largely also depends on the product / service. Also, a high number of beneficiaries does not mean high impact SWE

Among the entrepreneurs interviewed, improvements are seen around waste management and decentralized sanitation management (mainly sludge removal and disposal) which naturally has a local, positive impact on the water resources, soil, air quality as well as health and hygiene. Impacts that social entrepreneurs potentially create are that they can provide excellent opportunities to create **self-employment** for the entrepreneurs.

In phase I, there is **high diversification across the client base** with 80% of entrepreneurs responding to have clients in all three segments (B2B, B2C, B2G).[19] However, when it comes to (retail) customers, services or products are demanded by individuals with **above-average socio-economic status**. For continuous **spill-over effects** (also to the larger population, and beyond B2C and B2G) to happen requires large-scale demand of the service/product which is not the case now.

The **benefits for vulnerable communities** are created in several ways, as evidenced by the following three examples of **causal chains between product or service and the effect**:

- *Household purchases the product / service -> household is directly benefitting.* The example here, are the hydroponic systems to produce vegetables (developed by Sennara, Jordan), marketed by an NGO in Hitteen camp near the city of Jarash which clearly benefits vulnerable communities.
- *Municipality purchases the product / service -> households in the municipality are directly and municipality are (in)directly benefitting:* The example here is the septic tank emptying service for municipal organic waste collection (developed by Compost Balladi), being used in peri-urban communities where the main sanitation system (septic tanks) may coincide with a population skewed towards higher socio-economic poverty or other vulnerability levels.
- *Industry purchases the product / service -> industry and surrounding communities are benefitting*: The example here is e.g. treatment of olive mill wastewater which will reduce odour emissions and issues around the current landfill, with a reduction of large volume of waste by truck from factories to landfill.

As there are no tangible results in terms of influencing a regulatory process or developing policy papers, the level of institutionalization remains a weak point to be further addressed with more vigour. (Q14, Q26)

There have been **no tangible results** in terms of influencing or even initiating formal regulatory processes to institutionalize the social entrepreneurship at the level of formal state institutions (policies, sector strategies, by-laws or regulations). However, through the "Green network" / Green Entrepreneur Community Meeting in Jordan, the programme team has established a platform through which learnings are discussed and occasionally also shared with the wider audience e.g., through social media, and engagement with the previous Minister of Environment in Jordan. Interviewees confirm there is good outreach to policy makers – but that it would need more attention by the programme and more strategic in its approach to reach impact.

Reasons for this rather **soft approach** towards the policy or legal frameworks are diverse:

- Co-creating or contributing to national policy and sector strategies is not an explicit objective in the programme's result logic
- Engaging in national policy and sector strategy processes is not a genuine strength of cewas, given their organizational history, and cewas itself does not yet have the "standing" required to take a relevant stance in these processes
- At the national levels in Jordan or Lebanon, the Swiss cooperation offices were neither involved nor were initiative to kick-start such policy dialogue with the government partners in the context of water or green social entrepreneurship promotion

Nevertheless, the understanding of its **importance** to strive for a more enduring effect, and the possible entry points (policy processes in Jordan around the national environmental plan or agricultural plan) are well

[19] Final Programme Report, Phase I, 2016 to 2018.

understood by some of the implementing partners. A few possible implementing partners for the cewas programme more specifically mentioned were:

- The Swiss Cooperation offices given their good relationships with government authorities
- UN organizations such as UNDP, FAO, and ESCWA which are also working on food security and green technology promotion
- The Global Water Partnership which has a regional network (Mediterranean region) although apparently not very active and visible – a collaboration would need to be further explored

Relationship between entrepreneurs and the public sector are not perceived as competitive, the common narrative is one of SWE either being complementary to public sector or tapping into previously underdeveloped or new markets. The role of SWE in the supply chain of water utilities or public water authorities are unexplored fields of engagement potentially missing out on a relevant role of SWE and market. (Q24)

Interviews with entrepreneurs and ecosystem actors reveals that the entrepreneurial (and therefore commercial) approach to water and sanitation services is **not competing with the public sector**. There are two distinct cases underscored with distinct narratives expressed by the interviewees:

- **Complementarity or (temporary) replacing of services or products**: In the market for domestic and industrial water and sanitation services, SWE are mainly focusing on wastewater treatment, sludge management and reuse. Here they are seen to be **either complementary** (seen in a positive sense) or to currently i.e. possibly just temporarily be **replacing** (seen in a competitive, negative sense) the public service providers because the public services are currently not reaching these areas / customers.
- **New market**: In the market for innovative technologies and environmental services – such as hydroponics to produce vegetables, collecting organic waste to produce fertilizer, phasing out single-use bags to finance community projects etc. – the solutions are either completely new or were previously not developed in these markets, hence they are **not competing** with any public services.

However, the partnering with the formal political system to **promote uptake of water and sanitation entrepreneurship** through e.g., water utilities within the national agendas is **weak**. The opportunities potentially missed are:[20]

- **Bringing innovations by SWE into the service modality of established water service providers,** e.g. to improve existing centralized systems (energy efficiency) or to complement their service outreach with decentralized systems. This would need to also address the established procurement processes of the public sector which in many cases favor large service providers as compared to smaller companies. Apart from decentralized systems, drivers of innovation could be the platform economy (as a service provision modality) which capitalizes on digitalization (data management, smart phone use, remote sensing, artificial intelligence etc.)
- **Easing the participation of SWE in public tenders** by authorities responsible on water provision, sanitation, waste, for domestic users, schools, health facilities, among others

Work on the ecosystem is rather narrow, limited to positive effects visible at the level of systemic conditions (capacities of incubation partners, network, leadership and talent) but less on the framework conditions (legal and policy framework, engagement with ministries) (Q24)

While the programme in phase I emphasized on creating demand for entrepreneurial water solutions, a learning process is visible over time e.g., with the Ecosystem Study developed at the end of phase I, recognizing the need

[20] The relevance of these two points shall be further verified with water sector organizations, e.g with Yarmuk water utility (North Jordan) and ACWUA (regional association of water and sanitation service providers).

for a more systemic approach going forward. The **Ecosystem Study** (cewas, 2017) analyses the current situation and gaps based on the **entrepreneurial ecosystem model** by Stam and Spigel (see Figure 1).[21]

The Ecosystem Study analyzes the framework conditions and there the formal institutions (Stan/Spiegel model) but not policies specifically in the water and sanitation sector. The study appears a bit theoretic without introducing any concrete SWE business ideas, based on which the analysis is then done. Hence it remains unclear what business cases the authors had in mind (non-conventional drinking-water services? Decentralized wastewater systems?).

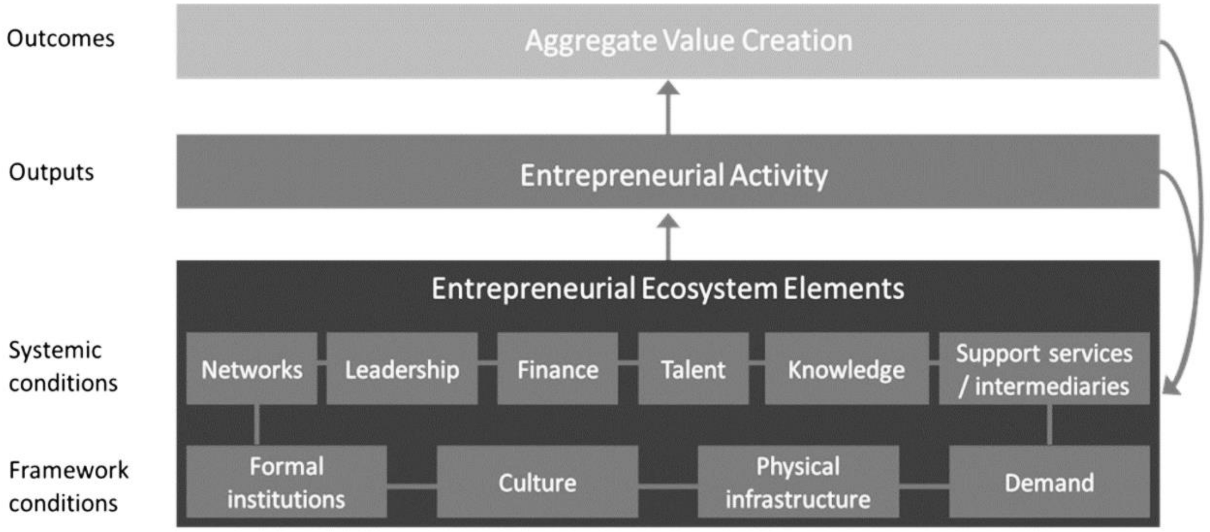

Figure 1 Entrepreneurial ecosystem model by Stam and Spigel (2016)

Figure 1 is helpful to illustrate the programmatic shift in phase II: With a stronger ecosystem focus in phase II, the programme strives for a lasting **impact on the systemic conditions** for green social entrepreneurship in the Jordan, Lebanon and Palestine, namely by working more strongly on "support services" (i.e. national incubators), finance (i.e. events / network including with impact investors) and the overall networking. It was **not the intention** in phase II to shift towards stronger engagement to work on the **framework conditions**, e.g. to engage in national and/or regional policy dialogue (e.g. through the Blue Peace initiative).

Following the common theory of change, it is important to **assume a comprehensive ecosystem approach including systemic *and* framework conditions.** The impact has been in the entrepreneurial system but with almost no effects at the formal framework conditions such as policies, laws or multi-stakeholder partnerships.

[21] See: https://dspace.library.uu.nl/bitstream/handle/1874/347982/16_13.pdf. The entrepreneurial ecosystem literature analyses the shift of traditional economic thinking about businesses and markets / market failure to a new economic view on people, networks and institutions regulating these interactions, and that markets are just one (imperfect) mode of governing the exchange of goods and services. The paper defines of entrepreneurial ecosystems as 'combinations of social, political, economic, and cultural elements within a region that support the development and growth of innovative start-ups and encourage nascent entrepreneurs and other actors to take the risks of starting, funding, and otherwise assisting high-risk ventures.

3.5 Conclusion and recommendations

Based on the findings, the current main strengths and weaknesses of the projects as well as the future opportunities and threats are shown in the following table.

Strengths	Weaknesses
• Comprehensive incubation programme with tailor-made coaching, very satisfied SWE • Strong networking skills (engagement with direct ecosystem, demand creation) • Strong need-based initiation but also demand-based market test of business models (no grants, but support for fund raising) • Technical assistance for national incubation partners in phase II	• No tangible results at policy or legal framework level, limited linkage to national government institutions and to Blue Peace Initiative • Relevance of SWE to innovate the formal, public water sector is unclear e.g. no link to the large water utilities in Jordan, no structured approach to advocate on changing public procurement processes in favour of water entrepreneurs • Entrepreneurs from vulnerable communities exist but are not a focus • Lack of solid impact measurement methodology and impact-related data collected from SWE, risking that the models developed don't get enough attraction by impact investors
Opportunities	**Threats**
• Systemic approach of cewas to SE development, including experiences and involvement in other projects / geographies. • From blue to green social entrepreneurs, health may be further considered . • Involve more strongly end-beneficiaries in monitoring and results measurement possibly also collaborate with university students to conduct case studies • Strategy 2022+ (focus on ideation, acceleration, and technical assistance for national incubation partners) shows agility and need-oriented approach by cewas • Exploring more systematically business cases with a link to digital technologies and the platform economy	• Governments are unwilling to integrate blue / green entrepreneurs into their sector strategies and thus hamper SWE to become a recognized factor and player in these sectors. Whether SWE are a key ingredient to reaching SDG 6 in the country of interventions is an assumption rather than a conclusion from a needs analysis, so the rationale for the government to integrate SWE into their sector strategies needs to become much stronger to ensure a lasting effect in the region. • Finding a suitable partner to address weakness in policy dialogue and linkage to formal water sector institutions (national, regional) may be difficult and will likely take considerable time for engaging and advocating to see tangible impacts. • Achievements related to creating an entrepreneurial ecosystem for WASH (and green) social entrepreneurs may erode when cewas moves into a new field of activity. The level of capacities at the incubation partners in Jordan and Palestine with regards to blue/green entrepreneurship promotion is not yet at a self-sustaining level, especially with regards to financial sustainability / business planning. • Both these limitations (uptake in sector strategies, limited capacities among incubation partners) may limit scalability of achievements e.g. building a reliable pipeline of SWE at incubation stage • If SDC discontinues co-financing, cewas will either search for alternative funding (outcome unknown) or scale down its incubation programme (probably cutting mainly on the policy dialogue which is not cewas' core business)

Key recommendations for SDC with regards to the cewas Middle East programme:

- The main recommendation is related to the relationship with the public sector in the countries of intervention, with several recommendations subsumed under this topic:
  - The programme must **better analyze** – through a formalize process, and in cooperation with the government ideally also the entrepreneurs and community groups – **to what extent SWE are a key ingredient to reaching SDG 6** in the countries of intervention as this is currently rather an important assumption than a conclusion grounded on a needs analysis. This analysis is required to **develop a**

strong rationale for the government to integrate SWE into their sector strategies as a relevant form or modality of providing solutions for reaching SDG 6.

- The programme shall invest more strongly to **establish relations with relevant government and semi-government entities**, to make them acquainted with social entrepreneurship in the environmental sector, to **initiate potential cooperation and supportive modalities** for social entrepreneurs and their products and services with the public sector.
- The programme must find **suitable partner(s) to address its weaknesses in national policy dialogue** and to strengthen its engagement through formal water sector institutions (e.g. technical working groups, sector policy discussion groups, etc.) to promote the establishment of SWE as a relevant actor or modality in the water (or environmental) service system of the state. Potentials: Bringing innovations by SWE into the service modality of established water service providers; Easing the participation of SWE in public tenders
- The potential role SDC can play in this regard must be considered. A stronger coordination role either of the cewas programme or by SDC Amman to ensure that the **regional policy network** (Blue Peace Initiative) allow to discuss issues around SWE must be grasped.

- The **Strategy 2022+** developed by cewas, based on three pillars "focus on ideation", "acceleration programme and coaching" as well as "technical assistance for national incubation partners" reflects a justified approach based on cewas' background and based on achievements / current needs with regards to SE development.
  - The shifted focus on **acceleration** is a good development and a design that SDC must further encourage. SDC must clearly focus on the potential for **scaling the positive impacts** at the level of customers / end-beneficiaries as well as closely monitor how customer segments evolve (issue of inclusiveness).
  - The **incubation partners** currently benefitting from cewas' capacity building support (INJAZ, PPU Hebron) must be regularly monitored to verify capacity improvement. A focus must also be on supporting their own business planning.
  - The Strategy beyond 2021 could be an **opportunity to engage with public sector** to present achievements so far, discuss future focus, implementation modalities and a stronger cooperation.
- Whether the programme will replicate its **incubation programme in North Iraq** is unclear and must be clarified to ensure that the investments made so far (mainly on SSWM training and initial coaching) can be further developed and turn into relevant impact.
- The **data** related to the supported entities (revenue, FTE, capital raised for each SE) as well as on impact created by the SWE at the level of end-beneficiaries must be collected more strategically and thoroughly – ultimately to justify the programme's performance and funding.

4. Review findings: YWF programme

4.1 Relevance

The project's intervention logic is to provide training and funding opportunities for young entrepreneurs to set up Social Water Enterprises in emerging countries. YWF seeks to attract more people to this issue and plant seed into a new generation. However, it is difficult to reconciliate the idea of empowerment of young social water entrepreneurs in difficult contexts with the objective of creating financially sustainable and impactful WASH social businesses, especially in the short to medium term, as young people from marginalized communities do not necessarily have the resources (network, funding) to do so. The project has not been designed to contribute to the overall objective of advancing towards SDG 6 in the short-term, since it appears difficult to provide large-scale access to safe water and sanitation through nascent initiatives.

The project follows a need-based approach vis-à-vis their primary target group – the youth – and provides them with tools and skills to tackle the challenges related to access to safe water and sanitation in their own community. The project empowers them as actors of change, increases their confidence and ability to adopt an entrepreneurial approach to solve problems.

For end beneficiaries, the SEs developed by the fellows target specific needs and help to solve a problem at a local level. The dimension of gender and vulnerable communities is deeply rooted in most SEs. The governance component of the project was weak in the first regional edition (East Africa), as the implementing partner did not have the right resources, networks or expertise to develop strong interlinkages to the public sector.

The project design is suitable to empower youth, create opportunities, and deliver improved access to water and sanitation at community level, but is not relevant to create financially sustainable businesses that are impactful at a large scale (Q1).

One of the main assumptions behind the project's design is that young local entrepreneurs can develop innovative solutions to problems they experience themselves – this approach is usually successful at identifying products or services that have a real impact and that consumers might be ready to pay for as opposed to trying to copy-paste an existing solution or business model. Young people are empowered as entrepreneurs and actors of changes; they are the own users of their solutions and therefore know the true needs in the market and can help to shape demand.

The main focus on youth is beneficial in the sense that it brings resources (training and funding) to people who traditionally would not have access to it. It also empowers them as entrepreneurs, paving the way for them to take a similar approach in the future, even though their current project might fail. It also plants seed for another generation to be more mindful about WASH-related topics.

However, the focus on youth is difficult to reconciliate with the objective of creating sustainable business delivering large-scale impact, as the combination of factors (the difficult industry dynamics of the WASH sector; the strong focus on the BoP that makes it tougher to create a financially sustainable models; and the regulatory risk and the ties to public authorities and services) makes it very challenging for young entrepreneurs, without much experience or network, to succeed in establishing a viable social enterprise. The different YWF editions are recent, it is therefore hard to assess the sustainability of business models developed. However, given the general success rate of start-ups in incubation programmes (as discussed in chapter 3.2, p. 17 of this report), coupled with increased difficulties for social entrepreneurs in a very demanding sector, it is unlikely that most of them will be able to grow and scale without a much more intense engagement and networking with the relevant ecosystem actors.

The project approach was in general well designed to meet the objectives – a constant evolution of the programme over the years helped to ensure the project was relevant based on lessons learned (Q2 and Q3).

The project approach in terms of design and methods (awareness raising; selection process; business training; funding and coaching) was overall well planned for the phase of ideation and to help young people with an idea and early-stage companies to work on the business model, develop and test a pilot. The programme shifted from supporting ideas, projects and non-for-profit initiatives (first edition before 2017, non SDC-funded) to actively engage with market-oriented solutions.

The targeted audience evolved from a global edition, sourcing applications from all over the world, to regional and national editions. The first regional edition was held in East Africa; followed by two national editions in Senegal and Ivory Coast. All locations were chosen based on demand (i.e., number of applicants). The comparison of interaction of SEs with their ecosystem in the global, regional and national editions reveals that a narrower geographic focus helps to root the fellows in their own ecosystem and develop valuable relationships for the future, both with other fellows and ecosystem actors.

The choice of YWS's local partner for those regional and national editions is therefore crucial to ensure good connections to the ecosystem. The fact that YWS is partnering more with local business incubators is also reassuring in terms of the increased quality of output.

- In the East African edition, SE projects seemed to be treated as non-profit initiatives calling the customers beneficiaries and focusing quite strongly on obtaining government support for the Ugandan fellows as opposed to create sustainable businesses.
- In contrast to the regional edition, the local partner Incub'Ivoir in the Ivory Coast edition conducted a hackathon before the actual selection process to get a better sense of the ideas and give the opportunities to candidates to refine their business idea before final selection. This shows a higher business acumen from the local partner in Ivory Coast.
- YWS is partnering with local incubator Concree for the Senegal edition.

The business training, both in terms of content and of teaching partner, was suitably designed and sourced to provide a valuable learning experience for fellows, as reported by the level of satisfaction of the fellows. Some suggestions for improvement include:

- Selection criteria could be adjusted: the upper limit for the age (30 years) was restrictive in some context. Having as an upper age limit of 40 years would have been more appropriate to allow for some work experience as university students tend to graduate later in some contexts, notably in East and West Africa.
- Training duration and format[22] could be customized: all fellows attended the same track, even though some might have more advanced business ideas. Two tracks could be developed to accommodate the level of learning needed by the fellows depending on the maturity of each fellow's project and possible background in business. The current one is best for fellows with existing experience with their initiative. In addition, the regional and national edition format appears to be short (10 days of training in the EA edition; extended to 14 days in the national editions in Senegal and Ivory Coast after review, with further ad-hoc training activities and coaching). Interview with fellows from the sample (East Africa edition) indicate that the coaching was sporadic. Fellows that have little experience in running businesses would probably benefit from longer support in the form of longer training and/or continuous coaching. The editions in Senegal and Ivory Coast are experimenting with longer formats - its effectiveness should be assessed when more information is available.

Resources attributed to create ties to the public sector to increase opportunities for the social water entrepreneurs were low. Some meetings were organized with public officials to promote the activities but to this date this has not translated in local or national government to effectively integrate the water entrepreneurship perspective to their strategies. Latest developments and current strategy implemented by YWS (moving from 1:1 meetings to engaging with a broader set of stakeholder, as a 60-stakeholders meeting in Dakar to discuss enabling conditions for Water entrepreneurship) might create better results in the future. The

[22] By "format" we mean the complete package provided to the (potential) entrepreneurs, which may entail training, coaching, networking support, organized events and meetings, field trips and social study tours on the ground etc.

focus on impacting government policies and government relations might need to be temporarily lowered as government officials are busy dealing with the sanitary crisis at hand.

Relevant partnerships with incubators, both at the sector level and regional level, were established. Ties to industry organization were not clearly defined and did not generate any substantial contribution to the achievement of project's outputs. (Q4).

The project established a main partnership with cewas to design the curriculum and deliver the training for the first editions. This partnership appears to have been relevant and successful to attain some of the objectives, in particular in terms of young people acquiring the necessary tools and skills to set up social enterprises; as well as integrating gender-lens and BoP approaches to their business models.

Focusing on the difference between the global and regional/national editions, the global edition's strengths has been to offer more opportunities for the fellows – networking opportunities have materialized into clients and investors for some fellows. At the local level, for the regional edition, fellows from outside Uganda did not establish meaningful connections with the ecosystem through the programme. The partnership with local incubators is very relevant to the objectives of providing business training and help young fellow to set up a company. In addition, they also coordinate the logistics of each local edition and connect the fellows to more ecosystem actors.

The Water Youth Network was brought in as partner to support the mentorship strategies of the YWF programme, which has not materialized. YWF adjusted the mentorship strategy following initial results.

The Global Water Partnership was not a key partner to the project – but provided with some ties to the overall ecosystem and a platform to communicate about the programme.

The project broadly fits some key policies and strategies in the intervention countries (job creation; supporting the youth; delivering better WASH solutions), but interlinkages with the public sector were low (Q5).

Based on the sample of fellows evaluated and stakeholder interviewed, the project objective appears consistent with national sector strategies and policies in the intervention countries. For instance, the Ministry of Water and Environment in Uganda confirmed that empowering the youth, promoting entrepreneurship and creating job opportunities were some of the key issues on their agenda. Stakeholders nevertheless pointed out a need to better link the programme with government entities, water sector strategies and implementation mechanisms, especially at the sub-national and local level.

However, the YWF programme has invested little to analyse the national (or regional) water sector strategies and policies and to find out how relevant young social water entrepreneurship is in those countries or regions. Thus, it remains unclear, to what extent and with what strategies YWF could and should promote SWE as a key ingredient to reaching SDG 6 in these countries or regions.

GPW basic values were deeply rooted in the project's design – gender-approach; inclusion of vulnerable communities and the "Leave no one behind" approach (Q6).

GPWs basic values were supported through the project – a gender-lens approach was adopted. The training put emphasis on gender sensitivity and how to develop product fitting the needs of women. The fellows interviewed stated that these learnings showed them the importance of adopting a gender-sensitive approach already in the design of the solution. Most of the entrepreneurs from the review sample focused on providing a greater sense of dignity for women. The project followed the approach of "Leave no one behind" and be as inclusive as possible with marginalized or vulnerable groups.

4.2 Effectiveness and Efficiency

The project is on track to achieve the intended outputs which does not necessarily mean the achievement of outcomes. For instance, the project successfully helped to initiate SE but did not allow them to become sustainable or to create large scale impact. Few fellows have been able to successfully transition from the pilot phase or show low financial sustainability – several of them are heavily dependent on grants. Although not a specific goal of YWF in the first phase, the project's contribution to the overall objective of advancing towards SDG 6 is nevertheless marginal, as the reach and depth of impact, as well as its lasting effects, are not demonstrated.

The transfer of know-how and skills to the entrepreneurs was satisfactory, as most fellows did not have a business background and were able to apply their learnings to improve their business model. Entrepreneurs reported higher level of confidence after completing the fellowship.

End beneficiaries (i.e., the customers of the SEs) reported in general high level of satisfaction yet complained about the price of the solution – illustrating the gap between appreciation for a solution and actual demand and ultimately the difficulties to create sustainable businesses.

The funds were well managed by the implementing partner who kept SDC informed of changes and constantly looked to recalibrate the efforts.

Most outputs of the project were met, and outcomes were partially achieved – while the project successfully helped to initiate social enterprises, it is not designed to help them become sustainable (Q7).

Overall, most of the outputs of the project have been achieved. As reported in the annual progress report, the team successfully:

- Created content and shared it on different platforms to reach young people on WASH-related issues
- Provided two global trainings and three regional/national trainings to 53 fellows, of which 27 are women, providing opportunity for women and young people coming from disadvantaged communities, with fellows reporting high satisfaction level related to the quality of the training
- Supported the inclusion of BoP and gender-lens approach in the business models developed by the fellows; supporting a human-rights approach and the "Leave no one behind" approach
- Disbursed seed-funding to support pilot projects
- Supported the emergence of a network of young fellows. The global edition did provide opportunities for the fellow to connect with actors from the broad WASH ecosystem. The East Africa edition was however less successful in connecting the fellows to local ecosystem actors (authorities, business community, WASH actors) as reported per the fellows from the sample
- Provided ad-hoc coaching to fellows, led by YWS together with cewas and local partners

Some other outputs were partially achieved – key activities were performed, but the implementation was not completely successful at the time of writing this report

- The mentorship part was not successful in the East Africa edition – A mentorship database was developed, but all fellows were not successfully matched with a mentor from whom they could benefit from effective support in growing their business. The mentorship strategy has been adjusted in later editions from assigning a mentor before the pilot project to assigning one after completion of the pilot project. There is currently no sufficient data to assess the quality of the mentorship for the editions in Ivory Coast and Senegal as the pilot projects had not been concluded.
- Policy messages were drafted and meetings with officials were organized, but this did not translate into the integration of the programme into national policy, or led to more targeted policy approaches to integrate young SWE as key partners in the national water and sanitation sector strategies and implementation mechanisms

Outcomes were also partially met:

- In general, young people were attracted to the water sector and were taught some necessary tools and skills to set up social enterprises.
- Social enterprises led by young entrepreneurs around safe water, sanitation services and sustainable water resources were initiated, but it is too early to say whether they "effectively offer sustainable solutions" – Considering the three editions held in 2018 and 2019 (2 global and 1 regional)[23], only 13 SWEs out of the 29 supported[24] have been able to complete their pilot. Those 13 SWEs have succeeded in creating working products or services for targeted communities, but the sustainability of those companies has not been achieved. In some cases, the end customers are not willing to pay for the product, making the business unsustainable financially. In the case of infrastructure development, it remains to be seen whether those solutions can last if no maintenance or support can be provided
- Lessons learned were shared with public and private actors – but it remains to be seen whether this leads to a lasting involvement of young people to provide solutions to water related challenges. A strategy was laid out to scale-up the initiative that can easily be replicated

Overall, the project successfully laid out the foundation for an ideation/incubation entrepreneurship programme around WASH issues in emerging countries. The programme's design is easily replicable in different geographies. The project provides funding, learning and development opportunities for young people who traditionally have difficulties to access those opportunities, either because there is a lack of financing for pilot and seed in the WASH sector, or because some of the fellows come from disadvantaged communities (rural, lower income, among other). YWF provides initial support but entrepreneurs need more support and funding to succeed, especially in the WASH sector and targeting the BoP. In addition, there are few structures (dedicated accelerators or funds) that could take over and support the entrepreneurs post the pilot phase.

The transfer of know-how to the entrepreneurs was mostly sufficient and adequate in the project – providing basic business tools for entrepreneurs to build a sustainable business model. The entrepreneurs reported high level of satisfaction overall. (Q8, Q9, and Q12)

The transfer of know-how with the entrepreneurs interviewed has been impressive. Fellows from the sample all learned a lot, especially on the business side, as most of them already had a WASH-background. For very early-stage companies, there is no doubt that there was a transfer of know-how and fellows got an opportunity they would otherwise not have benefited from.

Going forward, the YWS team appears to be very involved, providing ad hoc support when necessary. This will prove difficult to maintain as more editions are held and the pool of fellows grow. There is a risk that there is no adequate structure to support the entrepreneurs after they have finished their pilot project, limiting their growth. From an impact investor's perspective, fellows would need continued support, including financial, to prove their product market-fit and be attractive for private investors. This support must not come from pure subsidies or grants, but rather from funding from angel investors or acceleration efforts supported by private or multistakeholder initiatives.

The needs and expectations of direct beneficiaries of this project, i.e. the entrepreneurs, were predominantly met. From learning business basics (business canvas, pitching, marketing strategy) to having met clients and investors, the entrepreneurs who already had some experience in the field saw their initiative improve at a faster rate.

The programme gave self-confidence and a sense of legitimacy to the young entrepreneurs, and, for some of them, it gave them the courage to consider entrepreneurship as a legitimate future path. The World Water

[23] We do not consider the pilots from the 2020 national editions in Ivory Coast and Senegal as the Covid-crisis has generated strong delays in the pilot implementation.
[24] One fellow from the East African edition did not get his pilot project approved.

Week was a true highlight for the global fellows, who were exposed to a large number of stakeholders and accessed a forum they could not have attended otherwise.

End beneficiaries (i.e. customers of SWEs) generally reported high-level of satisfaction with the sample of SWEs reviewed. (Q10)

For the projects from the sample, the level of satisfaction by end beneficiaries about the product itself is generally high. End beneficiaries interviewed tend to report satisfaction with products or services they did not have access to before. However, one issue observed in the sanitation sector is the resistance towards having to pay to use sanitary facilities. In one social enterprises, although new facilities are bringing back a sense of dignity to female and disabled users (by having units separated and adequate toilets) and receive cleaning and maintenance, attendants received regular complaints about the small fee that needed to be paid to access the facilities.

At a broader level, there is generally an affordability issue for some of the solutions that are the most impactful. Feedback from users is very positive – yet the price of the solutions is too high and would need to be subsidized to be accessible for low-income households. For instance, one fellow provides domestic toilets that are adapted to the needs of disabled people. Another fellow has built an air-to-water technology to provide the resource in water-scarce areas. In both examples, the price of one device amount to several hundreds of dollars. The solution adopted by such businesses is exploring the B2B2C approach, where NGOs or organizations are the main clients, sponsoring the benefit to the target user. This approach is not necessarily sustainable as it relies on philanthropic money or Corporate Social Responsibility (CSR) budgets, which can be discontinued to attend other priorities or emergencies. It also increases a company's reliance on a few dozens of clients as opposed to hundreds or thousands when reaching end customers directly. SWE can also choose this approach as a temporary solution to increase the level of production which help to decrease the cost of the product and ultimately serve directly end customers. Over the long-term, the entrepreneurs should look to diversify revenue streams.

The project did not support the development of new policy or legal frameworks. (Q14)

Although efforts were made to collaborate with the government, no new policy or legal framework have been developed yet. These are however objectives that are both time intensive and costly, which should mandate for a dedicated team working alongside the local incubator, for more efficiency and real impact. Creating a strong connection with the government that can lead to policy change is a programme that needs experience as well as sufficient time and expert resources.

The funds are efficient to create a targeted impact for the entrepreneurs and a small community, but it is not efficient for the purpose of creating sustainable businesses. (Q15)

Regarding the seed funding, all entrepreneurs interviewed for the review had received their funding and seemed to be using it efficiently. For most of them, the grant financing was not enough to start their pilots and some were fortunate enough to have access to other sources of financing to complete their pilot.

Based on current data provided, YWS has worked with a total of **63 entrepreneurs** since the beginning of the programme in 2017. SDC's funding, which started in 2018, has supported 53 fellows, of which 47 entrepreneurs (the rest is NGOs and projects).

- Looking at the project's budget directly linked to delivering business training and providing funding, the **cost** per social enterprise can be roughly estimated at CHF 8'118[25] (EUR 6'765)[26] – which would include an average grant of CHF 5'202 (EUR 4'335) for the 34 pilots funded.
- A few fellows were selected to participate in the acceleration programme and provided figures of their annual **turnover**. Those range from USD 300 to 118'000 for 2020 for 5 companies directly supported through SDC Funding (2018 and 2019 editions)[27], with an average of USD 46'040 of turnover over the year 2020. While other fellows not selected for the acceleration programme may have registered some turnover, these five selected ones are arguably the most promising ones. In conclusion this suggests that the project has not been cost-effective to help business go from an idea to create a business generating revenues.
- With the same sample, we also find that 4 of those 5 companies with most potential have raised additional money in the forms of **grants** – from USD 20'000 to USD 135'000; an average of USD 70'083 for those 4 companies, suggesting a factor of 14, based on initial grant received from the YWF edition. We find that grant as a financial mechanism can provide the necessary head start entrepreneurs need to test their product; but at the same time this can also create a perverse effect as entrepreneurs will continue looking for grants as the business grows, without focusing on diversifying its revenue streams.
- None of them has yet raised **equity**, even though one fellow (at the time of writing this report) is raising USD 650'000.

Overall, we find that the project has not been cost-effective in the sense of creating sustainable businesses that are financially sustainable; create large scale impact and are at a stage where they could attract more private investors. Nevertheless, the efficient use of funds needs to be assessed through two different angles:

- Regarding impact created at a community level and potential to provide opportunity to a young entrepreneur – the funds were quite efficient in that regard. Each pilot positively impacted the living conditions of a set of end beneficiaries (up to 4'000 in some cases), and the funding received by the fellows made a significant difference in their personal and professional development.
- Regarding the creation of sustainable businesses that can grow, scale, and impact positively large populations – the amount of funding is not significant enough to make a difference. It helped to kick-start some projects; but, as noted above, fellows had to look for other sources of financing. This amount of funding also helps to conduct a pilot or create a minimum viable product, but it does not fully prove the business model. Larger amounts (thousands or hundreds of thousands of dollars) would be needed to launch more activities and fully demonstrate product-market fit.

Outreach and depth of impact at the level of target groups and resources deployed is negatively correlated (Q11).

In this project, it is not clear how the pursued objectives can help to support SDG 6 in the short-term. Investing in very early-stage ventures does not provide a high level of depth, as the businesses are working towards creating a solution that can find a market and can therefore not deliver impact at a large scale. Established entrepreneurs in the WASH sector are better suited to scale their solutions and reach a greater number of people. The project's approach helps to create awareness on WASH issues and involve youth. It also seeks to set up SWES, but entrepreneurship traditionally has a low success rate, and in the WASH sector, where businesses compete with NGOs and where clients are reluctant to pay, that success rate is even lower. Over the long-term, the project can foster a greater impact, in the sense that people have been exposed to the issues and have both the desire and the knowledge to be part of the solution.

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[25] EUR/CHF: 1.2

[26] We consider the budget directly linked to the business training and funding the entrepreneurs received (corresponding to outputs 1.2; 1.3; 1.4; 2.1; 2.2. and 2.3, amounting to a total of EUR 717'155). We assume SDC's contribution to be 50% on this amount; i.e. EUR 358'577, which effectively supported 53 fellows.

[27] Majik Water Technologies, Mobile Alert Toilets, Safe Drinking Water for All, Tierra Grata, iWash Africa.

The implementing partner was very responsible in the use of resources, and the project's design and budget were constantly adjusted to ensure a best use of resources (Q16 and Q17).

The implementing partner YWS was very proactive in communicating needs and changes to SDC; and to include lessons learned to improve the programme. The funds were disbursed efficiently. All fellows had to provide a proposal which was reviewed and adjusted if needed. The fellows received an amount of funding corresponding to the needs of the pilot and not as a fixed amount (maximum of EUR 5'000).

In 2020, the YWF programme transformed the global edition into an acceleration programme because i) this format created competition to the regional and national editions and ii) the needs of entrepreneurs after the completed pilot stage became apparent. Due to Covid-19, which resulted in a halt to pilot projects in the Senegal and Ivory Coast editions as well as a necessary postpone of the acceleration programme, YWS was granted in early 2021 a no-cost project extension to complete the activities set out in the original contract.

4.3 Sustainability and Partnerships

Most of the SWE developed through the project keep on operating after receiving support from the YWF. We find that they all formalize their activities. However, most of them are not investment-ready (i.e. have validated their product/market fit, their revenue model, have a large and stable consumer base), as they require large capital expenditures which is traditionally funded through grants. The sustainability of those SWE is therefore at risk, reinforced by the fact that they mostly operate as standalone, without benefiting from the networks and resources of regional, national or global structures.

At the project level, an initial strategy for replication has been developed, with a handbook to replicate national or regional editions in selected countries. The choice of the local partners is key to make it a successful edition, in particular given the importance of relations with the local ecosystems. There is also a clear intent from YWS on moving from incubation to acceleration as some of the fellows are more advanced and need additional support. There are however few existing acceleration programmes that can support them. YWS will need to establish partnerships with experienced acceleration partners to set up a relevant and functioning programme, as well as to contribute to developing the investor community in this topic. YWS as an organization has strengthened its governance and overall structure since the beginning of the project; yet there are some questions around its financial sustainability without support from SDC.

Overall, relevant partnerships have been established with institutions providing business training. The selection of local partners has also evolved in time to provide more business-oriented and connected organizations. The YWF should seek to establish stronger linkages to public authorities in the different countries of intervention and could reinforce partnerships with global organizations to gain access to a broader set of government actors and potential investors.

Almost all fellows have formalized their activities. Most of them are however not investment-ready. (Q19, Q20)

Most entrepreneurs have formalised their activity by registering actual companies. After the pilot project, most of the entrepreneurs have kept on working through their company to grow. Few fellows have abandoned, either due to external funding running out (in particular for capital-intensive model, in sanitation mostly) or other reasons (disagreement with the team). Most businesses have not reached a financially sustainable situation. Most of them are still heavily dependent on upfront funding to realize capital expenditures, and many are looking for grants to do so. They do not yet have demonstrated product-market fit (i.e. showing willingness from customers to pay for their solutions), shown regular and growing revenues with a diversified pool of customer, validated their value proposition, all of which would provide a track record attractive enough for commercial investors to invest in their project. One notable exception is a 2018 Global fellow, who is conducting a seed round of USD 650'000.

If the project certainly yielded some success stories, other findings indicate a low level of investment-readiness. Some entrepreneurs from the sample review did not have a realistic approach in terms of pricing and production, or vision for the future. This showcases that either a longer training or a continued mentorship might be needed.

At time of the review, few fellows from the Est African edition had been embedded in additional structures, whether national, regional or global, and there is not enough evidence for the editions in Senegal and Ivory Coast. The project has sought to create connections at the global level within WASH/entrepreneurship ecosystem but has not been successful at establishing significant partnerships at regional or national level. The latest developments and current strategy implemented from YWS (moving from 1:1 meetings to engaging with a broader set of stakeholder) might create better results in the future.

Strategies have been developed to replicate the achievements of the project, including lessons learned to provide a more targeted and fitting support. (Q13)

At the portfolio level, YWS has found a way to replicate its programme through local partners in different regions. Its partnerships seem to have evolved in strength as the Ivory Coast programme has been developed at a higher level of professionalism when compared to the original regional edition. More entrepreneurial experts have been involved and a level of support is also provided to promising start-ups who did not make the cut through a 2-days hackathon for the top 20 candidates.

One of the feedbacks from *Turikumwe*, the local partner of the East African regional edition, was that it was unfortunate to not provide support to more ideas than the selected 10. Through the 2-days hackathon, *Incub'Ivoir* provides a solution to that concern which could be extended to more applicants if this was desirable for YWS.

YWS is also transforming its global incubation format to an acceleration format, which is the logical next step to provide successful and more advanced fellows with additional training to refine their business models, dedicated technical assistance in the form of "consulting project", and more networking opportunities to keep on developing a sales pipeline but also meet potential investors from a selected pool of impact investors. Interested investors would be invited to provide micro-investments based on results ranging from EUR 5'000 to 20'000 to de-risk the projects and attract additional commercial investors.

The foundations to replicate and scale-up the project have been established, but it is not clear what is the real added-value if entrepreneurs cannot find support through other structure post the YWF. (Q21)

YWS has designed a project that can easily be replicated in different geographies, provided that there are quality local partners, in particular incubators, that can support the selection process and provide on-site business training and coaching. In addition, it is important that those local partners are well connected to their ecosystem, to provide relevant connections and exposures to the fellows. A key question is the financing of this project. YWF has secured additional smaller funders, but it is unclear who will fund these local incubation programmes in the long-term.

However, it is not clear what the real added value of replicating the incubation programme is, if there are no additional structures in place – such as established accelerators with the necessary skills and interested in working in the WASH sector – that can keep on supporting the entrepreneurs in growing and scaling the businesses. Supporting more targeted initiatives in selected regions and helping to develop the ecosystem could be an alternative.

The implementing organization of the project has consolidated over the years. Overall, its sustainability past the YWF programme is not ensured. (Q18)

YWS, the lead implementing partner of the Young Water Fellowship, consolidated as an organization throughout the course of the project. YWS was formally created as an organization in 2015 and has strengthened its governance and network over the years. The Young Water Fellowship programme started in 2017, and YWS has been successful in raising funds for a multiplicity of stakeholders. Nevertheless, SDC is to date its main funder; and the YWF is the organization's flagship programme. Without financial support from SDC for this specific initiative, YWS sustainability is not assured.

Stakeholders' roles were poorly assessed during the design phase of the project. Government institutions did not play a constructive or supportive role for the project implementation in the first regional edition; and YWS' strategy is evolving. (Q27)

Although the roles of key implementing partners were clearly defined in the design phase of the project, other stakeholders' roles were assessed at a minimum level. Other organizations were identified (World Water Council Youth Delegates; Global Water Partnership Youth Focal Points; International Water Association Emerging Leaders; Waterlution) at a broad level, with the main assumptions of providing a forum for the programme and potential networking opportunities for the fellows.

In addition, the proposal also stated that national government would be contacted and linked to the fellows on an ad-hoc basis. It was not clear why each fellow would partner with authorities, let alone the role that they would play and the nature or rationale of these interactions. Dealing with the government to obtain product certification or to get endorsement of their project as a sponsor was generally a struggle for most of the start-ups. In the first regional edition of the programme, government institutions did not play a constructive nor supportive role for the project implementation, as they were generally not involved.

YWS' strategy evolved to include more and broader workshops with stakeholders in subsequent national editions (Ivory Coast, Senegal), as opposed to one-off meetings.

There has been an evolution in the role played by sub-contractors to more effectively support the objectives of the project. (Q28)

YWS has partnered with local incubators and/or NGOs to support the set up and the roll out of its editions. For the East African edition, the roles seem to have been less well defined as some partners described *Turikumwe* as being mainly a logistics partner as opposed to one bringing strategic support to the start-up. However, this was inconsistent with the appreciation perceived by some start-ups for their work. In Ivory Coast, there seems to be a greater separation of roles and more independence from the local entity. *Incub'Ivoir*, the sub-contractor monitors and evaluates of the target results (impact and from a business standpoint) and takes action towards achieving these goals.

4.4 Impact

All SWE supported by the programme are working towards an improved access to water and sanitation while targeting disadvantaged communities. The impact is created at community level, usually where the pilot was conducted. We find that the project is very impactful for the entrepreneur and some end beneficiaries, but there is no clear evidence that this impact can be replicated at a large scale – impact at SDG 6 level is therefore low.

It is not possible to assess the impact created over the long-term – the project does empower local, young people who are empowered and benefit from additional tools, which could create ripple effects at a later stage – in the WASH industry as well as in other sector, as well as in terms of job creation.

In the East African edition, local or national authorities did not take ownership for the impact created by the fellows. There were low interlinkages with public actors. It remains to be assessed whether the same occurred in other editions (Ivory Coast, Senegal).

Fellows could be further supported in impact measurement to ensure more reliability in the indicators.

The project supports entrepreneurs with ideas to improve access to water or sanitation in specific communities or context, a large majority being disadvantaged communities. Nevertheless, the impact is not created at large scale. (Q22, Q23)

Table 2 illustrates some of the impact created by the fellows.

Company	YWF Edition	Short description and impact created
Akeza Washing Products	2019 East Africa	• Producing and selling soap at a lower price than competition, offering alternatives for hygiene products • Job creation by providing training to unemployed youth and income earning opportunity
Samawati Choo Cha Jami	2019 East Africa	• Building toilets that are clean and provide separate units for men and women, ensuring all users with basic dignity • Toilets are also accessible to people with disabilities
Syna Consultancy	2019 East Africa	• Manufacturing and selling portable toilets that are easily transportable and facilitate waste disposal
Majik Water	2018 Global	• Offering Air-to-water technology that was able to provide water for about 3'000 users since inception
Baño Grato	2019 Global	• Building modular dry toilets in rural communities • Engaging and train local communities in its maintenance to ensure its sustainability
Mobile Alert Toilets	2019 Global	• Installing sensors in existing latrines, mostly located in peri-urban areas, to detect overflow and facilitate the emptying process.

Table 2 Example of impact created by the fellows, as per the sample of SE reviewed

The SWE reviewed create a range of impact with a focus on WASH in urban and rural areas. The projects sought to provide access to water both in quantity and quality as well as sanitation solutions that fit the environmental conditions (e.g., low water availability). Some solutions focus on health, hygiene and dignity of disadvantaged communities.

As most of the fellows have been able to conduct their pilot, there has generally been an improved supply of water and sanitation levels in some communities and for a limited amount of people. It remains to be assessed whether this impact can grow and scale over time; or if the newly introduced solutions create a lasting effect for end consumers (i.e. maintenance of newly built infrastructure; company's survival to keep on providing a service or product, among others). Observing that few fellows have reached a certain level of financial stability, we find that the impact created by this project for the purpose of ensuring availability and sustainable management of water and sanitation for all is rather marginal. Although not a core objective of the project in its first phase, the broader ambition of GPW is to create systemic change and projects that can evidence it should be favoured.

Fellows had to assess the number of direct and indirect beneficiaries during their pilot project, and YWS provided support and correction where needed. There is a clear impact measurement methodology implemented by YWS, with yearly collection of key data. At the time of the review, indicators were not available. The interview with the fellows from the sample evidenced difficulties in measuring the impact created. The target indicators defined at pre-pilot phase are ad-hoc to each project. Indicators could be streamlined, using IRIS+ metrics for instance, to be able to report impact at YWF's project's level. At time of this review, impact was mostly communicated in terms of number of end beneficiaries. Additionally, YWS could consider developing a system to gather data on a more regular basis (bi-annual for instance). This would be beneficial for the entrepreneur, the implementing partner and the funder to have access to recent data to steer the project or make investment decisions accordingly.

Social enterprises from the sample all adopted a human rights-based approach – serving vulnerable populations and adopting a "Leave no one behind" approach (Q25).

The different projects that were reviewed for this exercise were created with the disadvantaged, vulnerable or marginalized population as key target users. All fellows were encouraged to review their business models to integrate gender and BoP perspectives during the business training, and they pursued this perspective in their pilot projects. In addition to addressing the needs of an already underserved population because of their financial means, some projects identified even more discriminated populations, for instance people with disability, and adjusted their products or services to fit their specific needs.

The level of ownership and impact of these activities by the concerned authorities is low – at municipal, regional and national levels. Fellows who reported involvement of local authorities were mostly mentioning local levels. (Q24, Q26)

There is limited data on the involvement of authorities in the different editions at SWEs level at the time of the review. Regarding the sample projects reviewed, few of the fellows reported an involvement of authorities. One of them acknowledged the importance of local police involvement as a project sponsor. In Uganda, the involvement of authorities was only at the local level.

There is little evidence that the project supported the integration of water and sanitation entrepreneurship as part of the national agendas of countries of implementation at the time of the review The potential for uptake and wider dissemination in terms of institutional framework and public sector engagement appeared rather low, as first editions did not closely associate policymaker. Over time, YWS shifted its strategy and one multistakeholder event had been held in Dakar in 2020 to start a dialogue on enabling conditions for WASH entrepreneurship. The result of that initiative and subsequent ones should be assessed to understand the level of ownership by the concerned authorities.

We also find that the countries were the editions were held are not priority countries in the GPW's programming framework for 2021-2024 (Kenya, Uganda, Ivory Coast or Senegal). The set up does therefore not allow to capitalize on Swiss bilateral cooperation in these countries, which could offer support in linking the programme to relevant authorities.

4.5 Conclusion and recommendations

Based on the findings, the current main strengths and weaknesses of the projects as well as the future opportunities and threats are shown in the following table.

Strengths	Weaknesses
• Most of the young entrepreneurs benefitting from the programme get access to resources (training and funding) they would otherwise not have access to • The project helps to create a notable impact in the lives of the entrepreneurs themselves; their teams and some of their surrounding communities • The project empowers young social water entrepreneurs and plants seeds to create a new generation of people concerned with the WASH topic and how entrepreneurial approaches can help to solve WASH challenges	• Difficulty to reconcile the objective of creating financially sustainable and impacting businesses with the objective of empowering youth • SWE create impact at the level of a community but this impact seems very difficult to scale beyond that community • Grant as a financial mechanism can provide the necessary head start entrepreneurs need to test their product; but this can also create a perverse effect to continue looking for grants as the business grows, without ensuring its financial sustainability • Young entrepreneurs are not necessarily experienced to deal with strong interference by the public sector which is typical to the water and sanitation sector • The length of the training / coaching programme in the first regional edition (East Africa) was insufficient to fully equip young entrepreneurs with the right tools and necessary support to reach a relevant market scale. It remains to be assessed whether the

	reinforced coaching provided in newer national editions (Senegal; Ivory Coast) can support greater sustainability • The project's results at policy level were weak in the first editions (global and regional) – it is not YWS specialty or core competence to deal with public authorities. Strategy has evolved in subsequent editions and the results should be assessed at a later stage
Opportunities	Threats
• The acceleration programme is a logical and necessary next step to capitalize on entrepreneurs that are showing most potential (i.e., have validated their business model and are post-revenues) and bring some to scale. The virtual format allows to pool them from a variety of locations but still needs to identify how to root the entrepreneurs in their local contexts • The replication and institutional strengthening of the national/regional edition has the potential to shape and develop the pipeline of SE in the WASH space, provided the right local partners are chosen to implement the initiative	• Whether SWE are a key ingredient to reaching SDG 6 in the country of national or regional editions is an assumption rather than a conclusion from a need analysis; the rationale for the government to integrate SWE into their sector strategies needs to be strengthened • Risk that future national or regional editions do not partner with a local organization deeply embedded in the related entrepreneurial ecosystem, potentially jeopardizing the success of the future edition • There are few structures (accelerators, funds) that are able to keep on working with the companies supported by the YWF, resulting in potential low efficiency in the use of funds in the long run • The core focus on BoP (< USD 2 / day) makes it very difficult for those businesses to be sustainable • YWS heavily dependent on SDC funding (flagship donor), its financial sustainability is unclear

Key recommendations for SDC with regards to the YWF programme:

- The GPW should establish a clear **definition of objectives** for the project, in particular whether creation of sustainable businesses is a key target. As indicated in the previous analysis as well as in the last no-cost extension request, the objective of the project is not necessarily to create sustainable businesses that can deliver a high level of impact. The project does provide an interesting design for youth empowerment and creation of opportunities, fitting some of the key components of the GPW's 2021-2024 programme framework (water voices primarily, water, sanitation and hygiene for people)
- The programme should focus on selected **countries and regions** as opposed to any place in the world. Analysis should be done upfront, and the choice for locations should be based on quality of the existing entrepreneurial ecosystems, legal framework conditions in the countries and how they embrace SWE as a potential solution to WASH challenges, as well as the potential pool of entrepreneurial ideas and projects. This will help to target resources and support local ecosystem development. GPW should seek to embrace this approach and promote it with other co-founders. The fact that national institutions or foundations fund this project would signal a potential for SWEs as part of the solution in the countries of implementation – it is likely that they would also favor some upfront work that can ultimately benefit greatly the success of the implementation.
- The set-up of an **acceleration programme** is a good development and a design that SDC must further encourage, as it creates more support for entrepreneurs past incubation stage. The quality of the impact investors pool, as well as the ties the accelerator will develop with the ecosystem are key aspects that GPW should deepen. Whether an acceleration programme at global level makes sense should be assessed post-Covid – roots within local ecosystems are important for both the success of the initiative and the social entrepreneurs.
- The replication of the **incubation programme** can work but needs stronger ties with local actors, including public authorities. The choice of local partners will be key to the success of the edition.
- Some **design elements** could be adjusted – for instance, the length of the program or different tracks for difference in projects maturity. Similarly, **eligibility criteria** could be reviewed: the age limit could be elevated to 40 years, allowing to attract more projects with potential.

- Given the limited resources allocated to the **engagement with the public sector** as well as YWS' limited experience and know-how to do so, GPW should re-evaluate how to best support this component, which is particularly important if building sustainable social enterprises is a key objective (see first recommendation). If so, the GPW should reinforce both resources for this track (for instance to support a strategic mapping for complementary partners in ecosystem development and cooperation at the national and regional level) as well as provide its own network and in-kind support in key locations if possible e.g. through Swiss cooperation offices or Swiss chamber of commerce.
- The **data** related to the entity (revenue, FTE, capital raised) as well as on impact created by the SWE at the level of end-beneficiaries must be collected more strategically and thoroughly – ultimately to justify YWS' performance and funding

5. Review findings: portfolio of six social water entrepreneurship projects

The following findings cover all six projects including those two analyzed in chapter 3 and 4.

5.1 Relevance, efficiency and effectiveness of interventions

The six projects aimed at a variety of outcome-level changes and with a slightly different main focus at the impact levels. While the intervention logic of all projects/programmes contributes to either SDG 6 (water) or 10 (agriculture) the level of systemic focus varies. Creating self-employment opportunities is a more tangible result compared to the results at water management, improved water and sanitation services or health level. (Q1).

The analysis of the result chains of the 6 projects shows the following:

The overall goal at the **impact level** is **different per project** as shown in Table 1. Listed are the *main intended impacts* (and not what was ultimately achieved). Impacts can be categorized in **4 types**:

(A) business and livelihood improvements (in 5 of 6 projects)

(B) water and sanitation access improvements including health and food security (in 5 of 6 projects)

(C) youth empowerment (in 1 of 6 projects)

(D) environmental improvements including water efficiency (in 2 of 6 projects)

Based on the analysis, by design 5 of 6 projects followed both long-term goals: access to water and sanitation as well as business development and livelihood development. This underlines i) the relevance of calling it a social water entrepreneurship portfolio as well as ii) a certain heterogeneity of the portfolio.

At **outcome level** equally a high **diversity** is visible, there are mainly **8 types** of intended outcomes:

(1) businesses developed in different stages, either in early stage (1a), after proven stage (1b) or in the upscaling/acceleration phase (1c)

(2) conducive ecosystem established or improved

(3) market demand stimulated

(4) youth entrepreneurs empowered

(5) Swiss water technology promoted abroad and (6) Swiss water technology label established

(7) health safeguards on wastewater reuse applied

(8) technological innovations developed

The high diversity of outcomes reflects the specific intervention logic per project, implementing partners and also target groups of the projects (entrepreneurs, ecosystem actors, Swiss water tec entrepreneurs, farmers).

In terms of outputs **and approach** the six projects are **relatively similar**, consisting of providing trainings, individual or organizational coaching, knowledge brokering and networking. The most apparent difference is at the level of financing to the entrepreneurs or supply chain actors where we see three different types:

- cewas and the RRR projects in Lima and Kampala: did not provide any grant funding to prototype development or testing (except for minor demand creation e.g. social marketing expenses)
- YWF, SUSW and SUPW provided grants to social entrepreneurs to develop and pilot their prototype or expand products, with grants from a few thousand
- SBB provided loans and with volumes up to CHF 250’000

Project	Approach / Outputs	Intended Outcomes	Intended Impact (as stated)	Intended Impact (at SDG level); bold: main focus	Intended Systemic Approach
Cewas ME programme	Training programme, coaching, networking, OD incubators, (no funding), ecosystem engagement	(1a, 1b) Green or WASH business models in ME proven or ready to scale (2) Conducive ecosystem in place; Organizational capacities of national incubators improved (3) Demand for innovative SSWM solutions increased	(A) Entrepreneurial ecosystem for green / WASH businesses (B) Availability and sustainable management of water and sanitation for all	**6 Clean Water and Sanitation** 8 Decent Work and Economic Growth 11 Sustainable Cities and Communities 15 Life on Land	1 (phase I) 3 (current phase II)
YWF programme	Training, coaching, networking, pilot grants, (ecosystem engagement)	(1a) WASH business models piloted or proven (4) Youth entrepreneurs empowered	(C) Youths as agents of change in the water sector (B) Human rights to water	6 Clean Water and Sanitation 8 Decent Work and Economic Growth **10 Reduced inequalities**	1 (phase I) 2 (current phase II)
SBB	Loans, coaching, networking	(5) Swiss WASH entrepreneurs / technologies marketed in global South (6) SBB technology export marketing platform and SBB label established	(B) Access to safe drinking water and sanitation (A) Use of Swiss technologies and innovation	**6 Clean Water and Sanitation** 8 Decent Work and Economic Growth 9 Industry, Innovation and Infrastructure	1
RRR Lima **RRR Kampala**	**Lima**: training, networking, coaching **Kampala**: training, networking, coaching, engagement with public sector	(1a) RRR business models in Peru proven and/or ready to scale (7) Health safeguards on wastewater reuse widely applied	(A) Safe reuse models of resources generated from liquid and solid waste; Livelihood opportunities; Cost recovery in the sanitation sector (B) Food security and health (D) Safeguarding of environment	**6 Clean Water and Sanitation** 3 Good Health and Well-being	3 in Lima and Kempala
SUSW (Antenna Foundation)	networking, coaching, small grants, policy dialogue South Asia	(1b) WASH business models for HTWS consolidated, market expanded (2) Conducive ecosystem in place (5, 6) Swiss technological innovation / WATA technology developed and marketed in global South	(B) Improve access to safe water in (rural) households; realize human rights to water (A) Entrepreneurial ecosystem for WASH businesses	3 Good Health and Well-being **6 Clean Water and Sanitation** 8 Decent Work and Economic Growth	2
SUPW (iDE)	coaching, marketing support, technical R&D, supply chain development (agri outreach)	(1c) Drip irrigation kit sales expanded; global supply chain improved (8) Technological innovations / water productivity tools developed	(A) Increase smallholder income or reduce workload, promote retailer businesses (D) Efficient water use	**12 Responsible Consumption and Production** 8 Decent Work and Economic Growth	2

Table 1 Overview of portfolio projects along outcomes and impact levels and categorization

The analysis shows that by design the six project's objectives and the general approach are diverse and reflect to a **varying degree** the intent to **initiate or promote systemic change.** By systemic change we mean an explicit focus on shaping or transforming the entrepreneurial ecosystem, including systemic and framework conditions (see Figure 1 in chapter 3.4). We provide a **qualitative, corresponding rating** of the level of systemic change in the last column of Table 1 (1: absent, 2: limited, 3: important, 4: primary focus).

- RRR projects in Lima and Kampala, cewas programme phase II: **important** systemic change focus (rating 3)
- SUSW, SUPW, YWF programme phase II: **limited** systemic change focus (rating 2)
- YWF phase I, cewas programme phase I, SBB: **no or negligible** systemic focus by design (rating 1)

The rating illustrates how the focus **evolved over time** towards integrating a stronger systemic approach as shown in the ratings of the two ongoing projects.

The set of **implementation partners** of the 6 projects is heterogenic and each project engaged with a set of partners appropriate in their own right. The implementing partners (and some other, e.g. Aqua 4 All) are quite well **connected with each other** and collaborate on case-by-case basis (cewas supported SBB and YWF programme on business training; *seecon* (of which cewas is a spin-off) implemented the RRR in Lima; Aqua 4 All and FANSA supporting Antenna), thereby creating **synergies** among themselves. This shows the good connectivity in this space, however from SDC's perspective it also bears a certain risk for a grey area of double-financing. The *Swiss Water Entrepreneurship Pact* (SWEP) which was created in 2019 could be a way for SDC to have a more clear-cut relationship with the different organizations active in the field.

The analysis reveals mixed project results and rather limited long-term effects for the completed projects at the level of SWE with impact and at ecosystem development levels. The ongoing projects show so far promising achievements at the output level and a rather mixed outlook at the outcome levels. (Q2 and Q3)

The analysis reveals mixed results for the 4 completed projects (SBB, RRR, scale-up safe water, scale-up productive water):

- **Swiss Bluetec Bridge (SBB)**: The outcomes and objectives from first phase were not attained due to two main factors: 1) narrow definition of sectors covered and therefore lower applications from entrepreneurs than expected; 2) the PPP financing mechanism could not be implemented as business cases could not be proven. However, a credit extension during phase I allowed to get more applications thanks to a broader definition of eligible technologies / solutions programme and companies were further supported during phase II to help them grow and become sustainable up to being able to attract private investors.

  During phase II, the time frame to grow and scale the companies was underestimated. Out of 11 companies supported, as of today only 3 have reached a certain level of sustainability and have been able to create impact beyond target; i.e. serve a greater number of beneficiaries than estimated. However, companies have had troubles managing the loans and several are facing bankruptcy.

  Overall, we find that the project's design and approach was not optimal. The implementation of Swiss technologies in a top-down approach in emerging countries was more difficult than anticipated in the design phase due to many externalities on field. Upfront analysis would have been needed to understand exactly how and why these technologies were particularly suiting the context in which they were implemented. Ideally, solutions are sourced directly on the ground by the same users rather than brought from afar. In addition to this design's flow, the choice of the implementing partner was not optimal, as the partner did not have experience in financing companies (due diligence and evaluation process; giving and managing debt instruments) nor in building businesses (the implementing partner did have experience in business strategy but was not as such an incubator or accelerator).

  For phase III, a new partner, FinanceContact, was engaged to find an exit strategy based on individual loan repayment strategies. Discontinuation of the loan programme by SDC was disappointing to some of the companies, but considering SDC's interests, the work of FinanceContact seems satisfactory.

- **Safe Resource Recovery and Reuse (RRR)**: The project delivered good results in Kampala as the outputs and outcomes with respective indicators were met, but mixed results in Lima. A strong cooperation between public and private sectors and strengthening of legal framework is observed in Kampala (Uganda), illustrated by the progressing formalization of fecal sludge service providers. The regulatory achievements in Lima (Peru) are less evident in a context of strong public sector regulation, but a public-private working group was established and led to the implementation of various ordonnances. The group was still active as of 2020, but the Covid-19 pandemic has made it more difficult to keep on working. Political instability in 2018 in Peru was also a difficulty for the project, with changing administration who did not seek continuity with previous projects. At the entrepreneurial level, results were very encouraging in Kampala. Several businesses were formalized, and a call center was established so that end users have a single contact point to ask for collection service. This has provided more transparency for the consumers and higher competition for the businesses. In Lima, there has been very limited entrepreneurial initiative around sludge recovery and reuse. As most of the raw materials, especially water, for RRR activities are controlled by public authorities, most of the participants to the business trainings were municipalities. Although those were able to work on specific projects, they were limited by municipality budget and few were able to implement their project. There was also low engagement from private enterprises. In both locations, the Safe Sanitation Planning (SSP) tool has been promoted whereas uptake by entrepreneurs and enforcement by authorities remains to be pushed forward.

- Scaling up safe water (SUSW, phase II): SDC's end of phase report named the overall achievements as "extremely positive and encouraging". The overall goal of progressive realization on the human right to water has been quantitatively achieved, with more than 3.9 million end beneficiaries reached in six countries. 7 business models delivering Household-level Water Treatment Solutions (HWTS) such as water filters or chlorine kits have been consolidated and 3 of them showed particularly good results. Emergency situations played an important role in the short-term / temporary success of some enterprises because of high market demand and government support (*ECCA* and *Tinkisso*, *Pakoswiss* after end of the project). Although the establishment of *WATALUX*, an enterprise based in Geneva and spin-off of the Antenna foundation, was not founded by the project itself, the project was instrumental to test the WATA technology in different markets through different products. All entrepreneurs interviewed report excellent and continued relationship with Antenna/WATALUX, good technical support, and a very helpful network through Antenna/WATALUX with other entrepreneurs (knowledge exchange on WATA technology application) or investors.

  The interviews with two entrepreneurs (*Spring Health, Pakoswiss*) showed that further developing market demand and scaling are difficult, especially when targeting BoP and without benefiting from external grant funds. Although social marketing had some positive impact on the demand, the financial resources to fund it at scale could not be generated through revenue. While Spring Health company (water kiosk franchise model in West Bengal) managed to acquire a major revenue stream through carbon credit certification, the company *Pakoswiss* (chlorine flasks, Islamabad) chose the diversification of the product portfolio and benefitted from the Covid pandemic to accelerate its business again in 2020.

  The concrete impact at policy level is unclear. On one side, positive results have been reported in the promotion of HWTS at policy level through high level panels, workshops, and conferences in South Asia through the collaboration with *FANSA*. On the other side, these activities did not reach a relevant scope and appropriate scale – also compared to the WHO-led global HWTS promotion – to generate lasting policy impact.

- Scaling up productive water (phase I and II): At the level of 6 countries in four different regions (outcome I), providers of low-pressure drip irrigation kits and related support services were established. The project worked on the supply side (local retailer commitment, service provision through e.g., the Farmer Business Advisors (FBA) concept, co-developing solar handpump specifically for smallholders) as well as the demand side (co-created farmer-focused micro-irrigation products and adaptation of "off-the-shell" products where needed) to overcome the challenge of small margins with BoP customers and the hardship of changing the behavior of smallholder famers when cultivating their land. In SUPW phase I, the target of 25'000 irrigation kits sold was reached. In phase II, the project reached over 70'000 people across 14'360 households with affordable irrigation solutions delivered through established delivery mechanisms.

  Sustainability at the regional level among SE and the extension service providers is mixed, some initiatives like iDeal in Nicaragua continue to work successfully. Generally, the difficulty to make sustainable business with the BoP. The unsuccessful achievements in some regions and years have been strongly influenced by water shortage. The regional projects were insufficiently linked with water resource allocation mechanisms and with the overall water governance systems, for instance at basin level.

Related to the global initiative (outcome 2) there have not been observed long-term effects attributable to the project. Although in 2015 selected companies showed interest in setting up the "drip+" platform for social marketing and know-how dissemination for low-pressure irrigation technology, the platform has not attracted any funding ever since. According to iDE this is due to SDC's unfortunate strategic shift and discontinuation of the funding. The tools developed during the project to increase smallholder farmers productivity globally did not find a broad dissemination and it is nowadays unclear to what extend they are widespread. The dissemination of a market-based approach and the objective of iDE becoming a self-funded global supplier was not successful. Overall, the global initiatives accounted for almost half of the overall project budget, the impact was however rather limited.

The overall goal of the project was to increase smallholder income and water efficiency. While impact at the level of income has been shown, there is no evidence that it has contributed to increased water efficiency or even reduced water consumption. As the so called «paradox of irrigation efficiency» suggests that having more efficient irrigation technologies does not necessarily reduce water consumption at basin level.[28] Furthermore, according to iDE farmers buy irrigation kits to save labor time rather than to save water. Hence, using an irrigation system may not necessarily lead to a more efficient use of the water resources nor to an increased crop yield. The business model of combining technical advice and services through Farmer Business Advisors (FBA) seems to be suited to increase yield, establish a viable servicing business but not necessarily to promote water conservation.

Promising achievements for the 2 ongoing projects (cewas ME and YWF programmes): outputs appear to have been achieved so far, and the projects are on track to deliver the remaining of the programmes – but more investigation is needed to assess if those outputs actually support the delivery of outcomes:

- YWF programme: so far, the project is reaching the outputs as laid out in the logical framework. Despite the Covid-19 crisis and the different consequences this has had; in particular, a complete lockdown and a sudden halt to all projects; as well as the cancellation of the World Water Week, a key event in the programme's design, the project has been able to resume activities while adjusting to new settings.

  Although most of the outputs have been realized, they have not led to the achievements of outcomes. Social enterprises that are led by young entrepreneurs and seek to bring solutions for greater access to water and sanitation have been initiated, but most of them are not sustainable. Achievements were limited on the governance component – government with officials were organized but have not led to changes in policy or regulatory frameworks.

  Overall, the project has been effective in providing opportunities for young entrepreneurs, equipping them with new skills and tools and kick-start a number of social enterprises, but those are not delivering a large-scale impact. For greater details, please refer to chapter 4.1 and 4.2

- cewas ME programme: started in Palestine in 2013 to work on promotion of SSWM solutions and since 2016 initiated a regional programme with support from SDC, initially supporting early-stage start-ups by providing long-term and specialized incubation support and focusing on awareness raising, demand creation and establishing a regional network. In phase I, outcome indicator targets were all achieved (except female participation in the trainings, outcome 1) or overperformed.

  The phase II shows overall positive achievements so far, as the programme completed 2 1-year start-up programmes in Lebanon and Jordan (total of 27 start-ups) and training modules with at least 20 entrepreneurs in Palestine. By September 2020, 21'000 end-customers paid for products and services of cewas start-ups or actively support their sustainable businesses. Institutional capacity building to organizations such as INJAZ in Jordan or PPU Hebron in Palestine has been increased. During the pandemic,

[28] R.Q. Grafton et al. 2018: The paradox of irrigation efficiency, Science Vol. 361 Issue 6404, The paradox of irrigation efficiency

cewas has managed to go virtual with their incubation and awareness raising / training activities (*creation.camp*) and has / is creating several toolboxes and practical tools.

The cost-effectiveness of the six projects are related to the overall results achieved but are as diverse as the project outcomes and thus are not easily comparable. (Q3)

The following overview uses the available data to make a qualitative assessment of the cost-effectiveness of each of the projects.

Cost-effectiveness is assessed either i) at the level of the primary target group (e.g., revenue of entrepreneurs, funds raised by entrepreneurs, number of supply chain actors, etc.) or/and ii) at the level of the end-beneficiaries (e.g., income household of customers, etc.) (all depending on what data is provided in the reports / by the interviewees). As a last option we resort to cost-efficiency figures e.g., amount spent per start-up.

Project	SDC contrib. (mCHF)	Cost-effectiveness related to social enterprises
Cewas	2.58	About 100 entrepreneurs joined and completed the cewas incubation programme. The total annual **turnover** of these 100 start-ups linked to the cewas programme are estimated in the range of **USD 8 and 25 million** (see chapter 3.2) resulting in an average of USD 8’000 to 25’000. Compared to SDC’s overall co-funding of the cewas Middle East programme of CHF 2.58m it results in a **3 to 10 positive cost-effectiveness factor**. The actual contribution of cewas to each of these start-ups is not possible to specify. The employment opportunities are several hundreds, at the core team but as well in the supply chain (manufacturing) or value-added effects through increased consumption by these employees. We rate the cost-effectiveness of this project is **high.**
YWF	0.52	There is too little data to properly assess the cost-effectiveness of the project for social enterprises, and the evaluators therefore do not provide any quantitative metric. Ideally, the evaluators would have looked at the total revenues generated by the social enterprises, as a proxy for value creation and an evidence to some level traction by the company. As very early-stage ventures, it is difficult to find appropriate metrics, but some level of revenues would validate an initial market-product fit. This figure would be compared to SDC full contribution. At the time of the review, a total of 5 fellows were selected to participate in the acceleration programme and provided figures of their annual **turnover** (data for other companies is not available). It ranges from USD 300 to 118’000 (year 2020) with a **total of about USD 230’000** (see chapter 4.2) and an average of USD 46’040. The programme’ s cost-effectives to support a range of different youth initiatives is rated **high**, as the programme has supported a total of 63 entrepreneurs of which 53 by SDC funds.
SBB	3.92	11 social enterprises were supported by the project and have received loans of up to CHF 250’000. Those companies raised a total of **additional investments** of CHF 10.8m either through equity, debt or additional grants. 6 of the 11 companies received follow-on investments, with a few outliers which raised significant higher amounts (2 companies raised individually ~CHF 1.7m in equity and ~CHF 1.3m in debt; 1 company received CHF 1.7m in equity and CHF 2.7m in debt. The company that raised the most already had 5 years of operations and some pre-existing investors when it received the support from SBB). For most of the companies, is difficult to estimate whether this funding could have been received without the initial loan from SBB. We also observe that some social enterprises entered in high level of debt, and that the majority of them is still working towards paying back the initial SBB loan when this report is written. The project offers **mixed** results in terms of cost-effectiveness, as most of the companies are still operating, but only half of them are growing and scaling.
RRR Kampala (phase II)	2.32	No data on turnover or capital raised by the supported entrepreneurs is available. CHF 1’787’000 were **budgeted to implement RR&R business models** in Kampala (incl. extension). 6 businesses were supported through the initiatives, amounting to a total of CHF 297’833 per business, including all activities from the programme. The project was instrumental to formalize existing businesses, and has reinforced the market, reducing cost for final users (users can get access to the service through a dedicated call center, which allows them to compare prices and go for the best option).

Project	SDC contrib. (mCHF)	Cost-effectiveness related to social enterprises
		We rate the cost-effectiveness of this project as **relatively high** with tangible results achieved at institutional, entrepreneurial and end-beneficiary levels.
RRR – Lima (phase II)	1.02	No data on turnover or capital raised by the supported entrepreneurs is available. CHF 483’000 were **budgeted to implement RR&R business models** in Lima, supporting 13 participants through business training workshops and targeted technical assistance; for an average of CHF 3’715 per participants. Most of the participants were municipalities, and there is no significant evidence that participants have raised additional funds from other sources. We rate the cost-effectiveness of this programme to be **low** in terms of support to social enterprises.
SUSW (phase II)	1.57	The project supported 7 social water enterprises in three product categories: ceramic filters; safe water services in water kiosks; chlorine flasks. In 2018, 3 business models were viable (*SpringHealth, Hydrologic* and *Tinkisso*) and operated near to profitably. Current **turnover** data is not available from these companies. At the level of end-beneficiaries, the project contributed to reaching and improving the WASH situation of 3.9 million end-beneficiaries (of which more than 2.5 million in Guinea during the Ebola outbreak 2015/16) in six countries over the timeframe of 3,5 years. On average this results in a SDC **per capita investment cost of CHF 0.40**. No further data on impact created among these customers is available. We rate the cost-effectiveness of this project as **medium to high.**
SUPW (phase II)	4.50	No data is available about turnover of supported social entrepreneurs. In the ProDoc phase II, iDE reported a cost-benefit ratio of around 2.0 at the end of phase I (“each donor’s USD invested yields in some two USD of benefits to the clients (measured in a period of 3 years)”). It also projected a ratio of 5 to 10 for phase II. However, the additional economic benefits to clients were not assessed post-project hence no verification of that statement can be provided. In phase II, the project reached over 70’000 people across 14’360 households with affordable irrigation solutions. This corresponds to CHF 64 per person or CHF 313 per household. Figures on irrigated area are not systematically available. The review report provides area covered per drip kit as 165 m2 (Burkina Faso, phase 2; 650’000 m2 covered with 3’950 kits); 1’135 m2 (Nicaragua and El Salvador; 1’590’000 covered with 1’401 kits) and 3’350 m2 (Kyrgyzstan, 1’400’000 m2 covered with 418 kits). This shows that apart from Burkina the customers are not smallholders but rather large, industrial farmers, horticulture etc. Compared to our own experience with Driptech, a company which well systems to irrigate 100m2 for 25 USD or 1000m2 for USD 110 We find the cost-effectiveness of this programme to be **low to medium** in terms of support to farmers.

Table 3 Qualitative / partly quantitative assessment of the cost-effectiveness of each of the six projects (based on available data from project monitoring)

The six projects targeted different stages of a typical business development path, showing a certain heterogeneity in its approach and lowering the overall cost-efficiency. (Q3)

When considering a schematic path of four **business development stages** as shown in Figure 2, the six projects intervened in different stages:

- **ideation and incubation**: YWF programme
- **incubation:** cewas programme and RRR in Lima
- **acceleration**: SUPW, SUSW, and RRR in Kampala
- **acceleration and scaling:** SBB worked in both stages depending on the different businesses, however with a rather unstructured, limited effort on business coaching and advice.

The approaches of varied across these four stages in terms of intensity: while cewas took a structured and transformational approach, suitable to prepare SWEs for acceleration stage, the YWF programme choose rather a “quick & dirty” (in German: *Schnellbleiche*) first training to then let the young entrepreneurs develop and pilot their idea with the support of a micro-grant.

The project approaches varied also in terms of focus on entrepreneurial ecosystem development, e.g., on capacitating national incubators and networks, on engaging with the political and socio-economic ecosystem or impact investors.

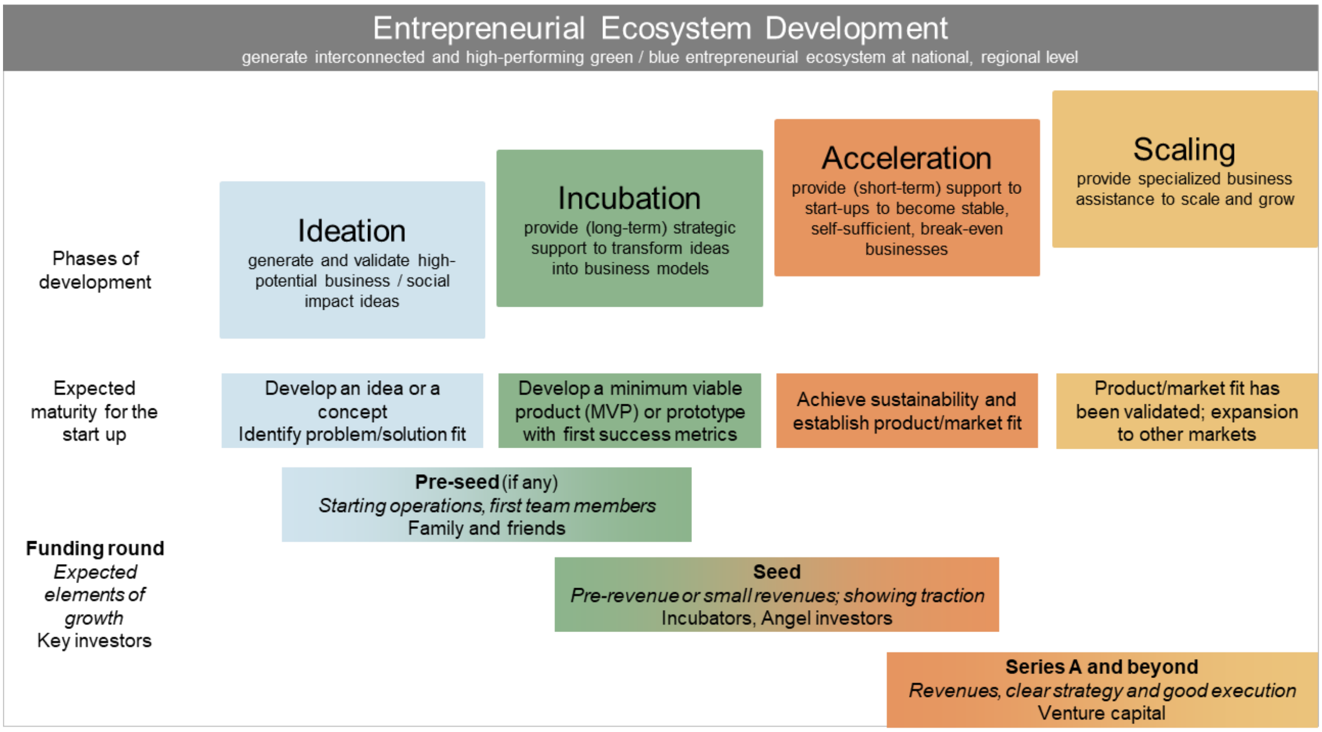

Figure 2: Business development path embedded in the entrepreneurial ecosystem (own representation; based on cewas' Strategy 22+ paper)

The value proposition (products or services) offered by the SWP promoted through the six projects contribute to a range of water-related (partly also general environmental) outcomes.

Figure 3 shows the various types of products and services (horizontal axis) along a range of water-related fields along the hydrological cycle (vertical axis). Both axes are segmented indicated with dotted lines.

- The coloured fields indicate products and services which were initiated, incubated or further developed within the 6 portfolio projects
- The non-colored fields indicate possible products and services which were either not found at all or not yet realized in the 6 projects (e.g. only idea stage)
- The grey coloured boxes indicate the water-energy nexus, i.e. either the product or service *using* or *producing* renewable energy

These products and services are often combined with a service package and are at different development stages in different geographies. Also the business model (i.e. how the products and services are delivered) are not shown here for simplicity.

The following observations can be made from this map:

- Related to water resources monitoring, planning and protection there have been no business models within the six projects. Within the YWF programme, there were some ideas related to this, for instance reducing evaporation from water reservoirs. This means that **SWE contribution to SDG 6.3.2 (Water Quality) is not well covered** by the portfolio
- Products and services related to water supply services (SDG 6.1) and sanitation services (SDG 6.2) are both well represented: while in **water** there seems to be a focus on **services and products**, in **sanitation** there seems a stronger emphasis on **infrastructure and services**

- Products and services with a **focus on rural** (**domestic; stronger focus on sanitation**) services prevail, while only one service focuses on urban water (smart metering and network monitoring)
- A **positive water-energy nexus** is visible at the input level (solar energy for pumping or heating) as well at output level (producing carbonized bricks from wastewater sludge)
- Many products and services go beyond the traditional WASH focus

It can further be noted that some product ideas (not operational business models) tried to combine different products or services in one e.g. a public toilet combined with a coffee shop or a luggage storage.

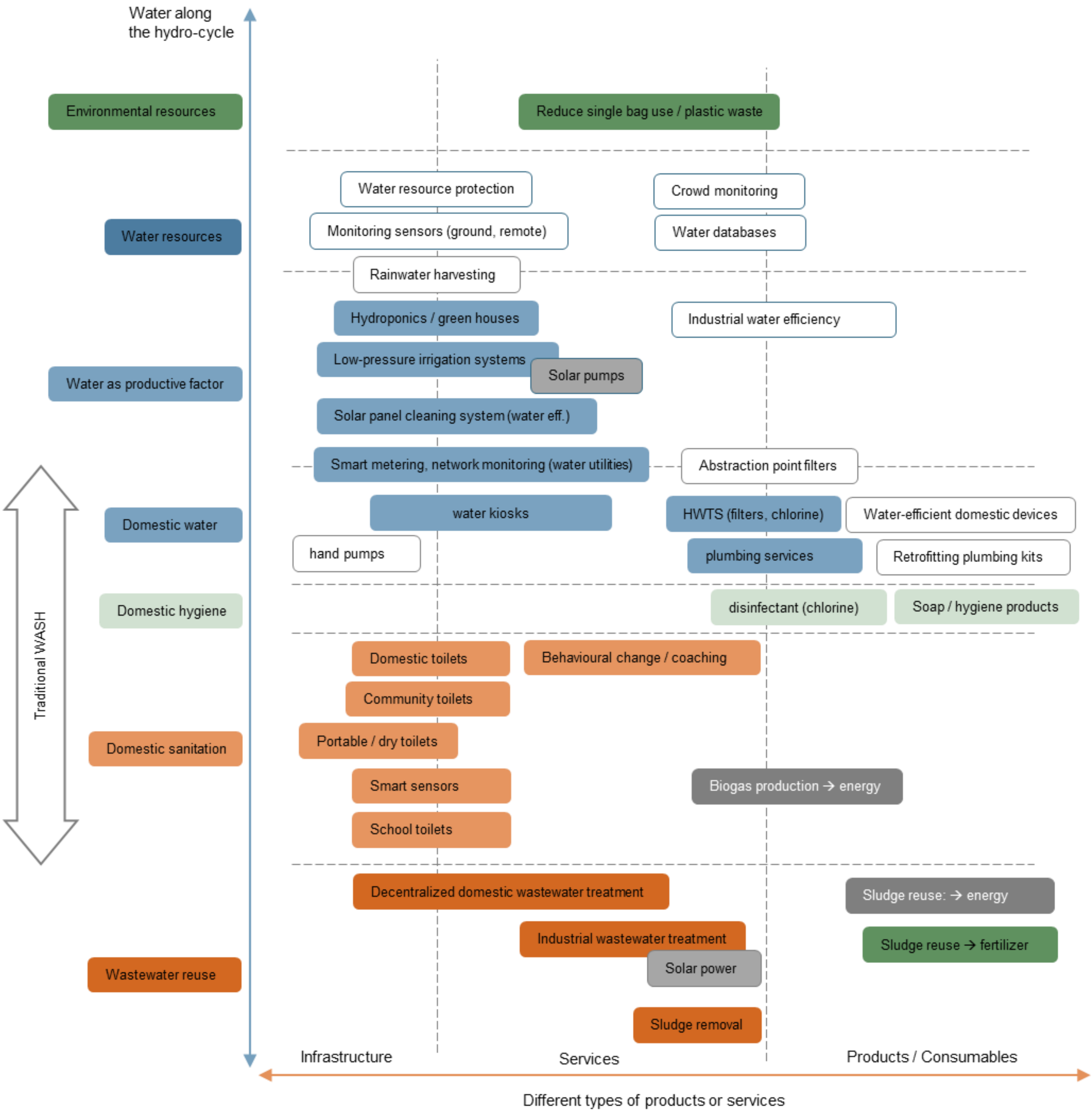

Figure 3: Types of business models mapped along different water-related outcomes. The vertical axis list a range of social-environmental outcomes (value proposition for customers), the horizontal layout has no specific meaning. The coloured fields indicated realized business models within the 6 portfolio projects. The empty fields indicate possible business models which were not realized in the 6 projects.

The business model analysis showed appropriate technical, social and environmental properties (with some exceptions) and often weaknesses around the financial properties. (Q4)

Given the homogeneity of social enterprises supported, assessing the key strengths and weaknesses of each business model would require a study on its own. The following table summarize some common observations in the social enterprises along four characteristics, as well as lessons learned to guide SDC on how to further engage with social enterprises.

Characteristic	General observations on the sample	Lessons learned
Technology and implementation	• Local contexts need local solutions: the SBB approach to support expansion of a technology developed in Switzerland was not always appropriated. A bottom-up approach should be favored • Importance of working together with clients and end-users – client centricity. In SUPW, lots of workshops and understanding pain points (for irrigation tools – for instance understand the size of the tubes; how distant they must be from each other; how to unclog them)	• Technology is important but is *just one* enabler in the business model. Its implementation, maintenance and offering the right service to customer is more important (demonstrated in water kiosks for instance) • There has been a very wide range of level and type of complexity in the SEs supported (for instance: producing and marketing hand soap, decentralized water treatment system, anti-splash toilet ring, a hydroponic/green garden system) – a more targeted approach could leverage existing expertise within SDC and create more obvious synergies between projects and actors
Environmental footprint and benefits	• Unintended effects were not always taken into consideration. For instance: potential risk of water contamination when using used car tires to protect reservoirs (heavy metals contamination risk); water-energy nexus aspects e.g. for transport or energy-intensive treatment methods) • Often cheap materials (plastic) are used, e.g. hydroponics or for drip irrigation technologies	• Assessing and communicating the environmental footprint must be standard for all SWE • Implementing partners should assess unintended effects when selecting ideas / SWE • Entrepreneurs are not necessarily conscious of those issues and could receive support to identify and mitigate unintended effects

Socio-economic footprint and benefit	• SEs have in general difficulties to find the right price point; the strong focus on BoP has made it difficult to create a functioning business, but many businesses have tried to adapt their business model by:
	  o Cross-subsidizing through other revenue streams
	  o Looking for a B2B/B2G format that allows to better serve end-consumers; diversification is high in cewas programme (phase I statistics)
	• The high level of competition from NGOs in difficult contexts have made it harder for social enterprises and reinforce the need for social marketing activities
		• The strong focus on BoP has created an additional challenge for all entrepreneurs. Another option can be to create a product for emerging consumers (USD 2 to 10 of earnings per day); and then work towards making this product cheaper so that it can effectively reach out the BoP
		• There is a necessity to include social marketing activities and help create the demand – these modules should be included in support projects for entrepreneurs

Financial viability	• Most business models have not achieved financial viability • The choice of financing instruments to support growth was not always ideal: loans have created situation of high debt; seed-funding in the forms of grants did fund MVP and pilot projects; but have incentivized reliance to this kind of instrument even after the project finished • Carbon credit created a new revenue stream for some businesses, which could be introduced and used by other SEs	• There is a need for improved evaluation mechanisms (formal due diligence) to truly understand the financing needs of the entrepreneurs and offer the right instruments • Debt should not be offered to very early-stage companies without proper evaluation and mentoring process – risk of high level of indebtedness • Bringing a company to an investable size requires more money – effectively doing so would require to invest in less companies

Table 4 Common observations and lessons learnt along four characteristics (technical, environment, social, financial)

5.2 Lessons learnt related to scaling up business models and market-oriented formats

The large-scale, wider uptake of business models is considered the condition for SWE to create positive effects at the impact levels (SDG 6, job opportunities). We first synthetize the key lessons learned from the six projects, both from the document review as well as the interviews with a multiplicity of stakeholders involved in each project from a different role.

We find that the format and approach of the projects needs to take into account the following considerations:

- Project's duration was usually underestimated and required extension to perform the activities set out in original proposals (SBB; RRR). Most of the projects choose to focus on very early-stage ventures, which did not take into consideration that it takes time to set up a functioning business. In particular, businesses in challenging sectors such as WASH and set up in emerging countries can take up to 10 years before achieving strong product market-fit, ensuring regular and sustainable revenues and starting to scale. This also requires significant amount of external funding to do so (ranging from USD 5 to 50 million). Without sufficient capital and time intensive support, most companies cannot grow significantly or operate profitably. This is difficult to reconciliate with a 4 years programming approach.
- Bottom-up approaches needs to be favored: the needs of the market, as well as the readiness of the customers to pay, are best evaluated on the ground, as opposed to a top-down approach where a foreign technology is integrated into a business model in an emerging market (SBB); or where business models are identified upfront and then trying to be translated into selected environment (RRR, in particular in Lima where the prevalence of the public authorities over resource ownership prevented businesses to emerge in WASH). Applying an existing technology in selected market can yield good results at scale (WATALUX in several companies; SUSW) but needs to be coupled with strong social marketing activities and work with customers to fully tailor the solutions to their needs (human-centric design approach; experience from SUPW).
- WASH for the BoP create some of the riskiest businesses, with high investments required e.g., in sanitation, negligible demand and extremely low margins. Apart from WASH this is also true for smallholder irrigation (SUPW). The strong focus on BoP (earning less than USD 2 per day) in all projects of the portfolio, although laudable, present even more challenges for the entrepreneurs. As an alternative, SDC could **explicitly** support projects where SE address **emerging consumers** (earning between USD 2 and USD 10 per day), build a financially sustainable businesses and move progressively to reducing their costs as they achieve more volume to be able to serve the BoP. This approach recognizes the complexity of building businesses targeting the BoP directly, as affordability is a key boundary to the success of SWE. Over the long-term, this can lead to more tangible results towards the "Leave no one behind approach" through engagement of the private sector. There is evidence of impact investors adopting this strategy and successfully driving their portfolio companies to expand the reach of their customer base and offer cheaper products to the BoP. [29]
- The choice of implementing partners is critical and must thus be done carefully. Supporting businesses, especially early stage and in difficult markets call for a clear set of capabilities: good knowledge of WASH issues; experience in providing business training and targeted coaching; ability to perform financial analysis and assess critically the businesses from an investor perspective. There is the need for a very exhaustive set of competences that need to be brought together, one partner rarely has all of them.
    - In some projects, the implementing partners did not appear to have the right business skills to effectively support social entrepreneurs (SBB in phase I, SUPW phase I) – this can be compensated with very strong accelerator/incubator partners, but one needs to make sure they are involved. Success stories were: Antenna with Aqua for All; cewas coming to complement SBB in phase II

[29] This is for instance the strategy of Leapfrog, a leading impact investor, that has invested through a dedicated fund in companies in the financial inclusion/insurance/health sector. These companies' first customer segment are emerging consumers (i.e. people earning between USD 2 and 10 a day in emerging countries); and they are successfully expanding their customer base to the BoP.

    - Implementing partners of SDC should facilitate the entrepreneurial development, not become a market player in itself (SUPW)

- **Co-financing** on programmatic levels (cewas, YWS, SUSW, SUPW) seem to have yielded slightly better results compared to **mandates** (RRR Lima and Kampala, SBB). An important reason is the co-funded partner's own interest to invest its own resources e.g., in establishing itself within the entrepreneurial ecosystem and in its own sustainability. Mandates may be more suitable for pilot projects. The choice of financial modality by SDC will further depend on the specific case.

The different projects also experimented with different types of activities and interventions. We find that some of them are paramount to successful starting, growing and scaling of social enterprises.

- Particular attention should be put on **ecosystem development**. While some projects were deeply rooted with local actors (cewas, RRR), other lacked that dimension (SBB, YWF – even though for the latter, improved partnerships with local incubators is improving this dimension). We also find that the whole value chain should be involved in the ecosystem. For instance, SUSW finds that the approach of "vertical scale-up" needs to be rooted in the proper supply chains i.e. the supply chain actors of a chlorine or filter product need to be fully engaged in the interactions with the ecosystem. A mere replication of ecosystem engagements in different regions without a thorough involvement of the supply chain may not lead to any tangible improvements.
- Most of the projects have delivered business training – but there is a **wide range of technical assistance tools** entrepreneurs also need: social marketing activities are one of the most important; but it also include field studies, consumer tests or M&E activities; or leveraging technology to track data and improve marketing and sales development. Some tools were less applied (Water Productivity Tool, HAFL within SUPW) than others (eCompendium, SSWM Toolbox by cewas).
- **Social marketing components** are essential in creating sustainable WASH businesses. Access to water or basic sanitation is still deemed to be free in some geographies and existing needs do not necessarily equal demand. The market needs to be created.

In a highly regulated sector, social enterprises need strong ties with public authorities. In general, governance was not a key component in the projects, and SDC should take a more active role in shaping this.

- There are many **challenges** social entrepreneurs face in the WASH and other water-related sectors: regulatory risks if the right legal framework is not in place, leading to informal actors that create parallel systems; a high degree of mistrust between the different participants; and finally, the fact that water is seen as a public good that should not be monetized.
- Implementing partners of all projects did not engage much with **public authorities**, formal **water sector agencies** or political **decision-makers**. They did not have the resources, networks or capabilities to actively work across these formal governance networks.
- Political interference in **SWE market creation** was not observed, hence the risk of public authorities actively obstructing or hindering private entrepreneurs to become successful in the water market is considered low. However, there is **clear potential to improve** the relations and to create more conducive formal institutions, generally for businesses as well as to promote the role of SWE in the national water sectors overall.
- **SDC** through its presence in Swiss cooperation offices as well as across global knowledge and policy networks should take a **more active role** in engaging with authorities on policy dialogue and strategic development. The RRR project in Kampala was a notable exception, as GIZ acted as a core actor to promote dialogue between the municipality and the entrepreneurs and helped to move the agenda forward.

- Reducing uncertainty linked to the public sector/regulatory framework does not only serve the entrepreneurs per se but might also create more attractive conditions for **blended or commercial capital** to flow into the sector in the region.
- Similarly, **public-private partnerships** should be encouraged and must be well-structured to provide a moderated dialogue and incentives for all parties. The mutual benefits of both partners must be clearly built-in and utilized in the collaboration. The RRR project in Lima experimented with a public-private working group with some satisfactory results at policy level, but there was very low involvement from the private sector.

For the six projects, we analyze the nature of these challenges and point out successes experienced from the perspective of the **private sector** (start-ups, investors) and the **public sector** (government, development agencies, public service providers). (Q5)

Private sector perspective	
Challenges perceived	Successes experienced
• Most of the companies are still at a **very early stage** which does not make them attractive for commercial (traditional and impact) investors • There is a general gap in terms of **available support structures** for companies in the WASH sector between ideation/incubation and acceleration/scaling • The **incubation stage is not concluded** in many cases i.e., the projects were not able to prove the business cases for many of the supported companies	• Building a conducive **entrepreneurial ecosystem** at the level of the capital cities in Jordan or Lebanon (and partly also Palestine) is possible with investing the necessary time and resources (cewas) • Building an **incubation** programme and capacity for strategic business advice for **acceleration** and **scaling** • **Empowering** young green / blue entrepreneurs is possible at the national or regional level and can be replicated and scaled (YWF)
Public sector perspective	
Challenges perceived	Successes experienced
• Difficult to establish the link between the entrepreneurial scene and the **public authorities** e.g. water ministries, high-level policy networks and working groups • Difficult to establish the link between the entrepreneurial scene and **public water utilities**, to utilize the innovative power of entrepreneurs for the benefit of existing water management • Limited appetite of private sector partner with rather **"bureaucratic" activities** such as the Sanitation Planning tool (SSP) in the RRR project • **Balance between grant funding and other financing mechanisms** to a) stimulate the business development but at the same time b) don't make start-ups grant dependent	• Formalization of existing businesses in the interest of the government through **well-structured and moderated dialogue** with the different parties (RRR in Kampala in particular) • Established **incentives** for businesses to cooperate with the public authority (e.g. telephone hotline run by Kampala city council to forward to sludge emptying businesses increases their revenue potential) • Adoption of formats that ensure **additional revenue streams** (RRR Lima) / intrapreneurship at the level of municipalities

Table 5 Challenges perceived and successes experienced by the private and the public sector

SDC mainly experimented with grants and loans in the portfolio of projects. There can be a lot of flexibility in financial instruments used, but they should all be assessed in light of the needs of the companies and delivered with the necessary expertise. Blended finance formats could also be explored in future projects. (Q6)

Here we discuss the three most important instruments (grants, loans, equity) and some other instruments:

<u>Grants</u>: a tool particularly appreciated by entrepreneurs and are sometimes needed in early stages, but can undermine the financial sustainability of the social enterprises.

Grants are probably the easiest instrument to disburse from SDC's perspective, as it requires rather low management and is usually very appreciated by entrepreneurs. On the sample of SEs reviewed, YWF fellows particularly appreciated the grants and indicate how crucial this funding was to the project. Participants to RRR regretted the lack of financing; and some municipalities in RRR/Lima entered the programme specifically believing that financing would be available). Grants will primarily be used for very early-stage companies to pilot and prove product-market fit.

Grants should be handled with care though, as they can create a **perverse effect** of becoming the preferred instruments for capital-intensive WASH businesses that can never reach full sustainability without it. Grants also tend to foster cultures of **dependency**, and often attract mediocre management teams.

Quite interestingly, a report[30] finds that 2.16 billion people out of 3.8 billion that do not have access to safe water have the ability to pay for safe water themselves without subsidies[31]. (Affordability is calculated using the WHO's target that no household should spend more than 3% of their monthly household income on water). This links to the previous point on the necessity of shaping demand, as some customers might have the means to pay for the product or solutions, but not the willingness to do so.

Grants can also turn into harmful subsidies, as pointed out by SUSW in the final report. Subsidies can **prevent consumer demand from being created or destroy it as it emerges**, leading SE out of business. NGOs for instance can also be a direct competition to SEs who, by giving out some products for free, prevent SEs to have a fair chance to sell their products and therefore avoid that markets are created. Second, many WASH businesses experiment with **B2B or B2G models** where NGOs, companies or government are their main clients. This allows them to reach the BoP while being financially sustainable but make them highly dependent on CSR budgets/donations. Once those opportunities are no longer available, the businesses have usually not worked on serving other customer segments and can no longer subsists. Finally, selectively subsidizing some actors creates **market distortions** and undermines existing local supply chains.

In conclusion, grants should be favored when technical assistance is required, i.e. when this grant will finance specific objectives, such as a feasibility study, R&D development, kick-starting or reach next-level social marketing, or data collection and analysis.

<u>Loans</u>: should be used for profitable companies that plan to grow and scale. Setting the right terms and ensuring a good management of the funds is essential for its success

The SBB project experimented with loans which were offered without a robust due diligence process and without continued support or technical support with the entrepreneurs after the loan was disbursed. This created financial distress for several participants. Loans can be an interesting instrument for companies in the expansion phase, being at least post-revenue and ideally being profitable. Those companies are looking to grow and scale. In this case, loans should be granted by implementing partners with experience and technical expertise in this kind of financial instrument to ensure conditions that are mutually interesting both for the lender and for the entrepreneurs, as well as to ensure the business will leverage this money to grow while being able to repay it upon term.

<u>Equity</u> instruments are not yet available to SDC and would require strong internal investing capabilities.

Due to internal restrictions, SDC cannot experiment with equity instruments. Equity would provide more control over the companies, butinvesting directly in companies would however require strong internal capabilities regarding investing that are not available now.

Other instruments could be promoted in future interventions. Creating new revenue streams for social enterprises has potential.

At least one SE supported by the projects (SUSW) has established **carbon credit certificates** as a relevant revenue streams. In this case (water kiosk franchise model), the certificate is issued to certify that through the water kiosk the CO_2 emissions produced when boiling water for making it potable (baseline method) are saved. The revenue from selling the certificates can make up to 40% of the annual revenue.

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[30] Dalberg (2017), The Untapped Potential of Decentralised Safe Drinking Water Enterprises

[31] According to the same report, the remaining 1.7 billion people would need partial subsidies (calculated with the same 3% threshold). Dalberg estimate those subsidies to amount to USD 14.4 bn (USD 8.50 annual subsidy per person) which would be covered by government, development agencies and charitable support.

Some SEs benefited from **microloans provided by third parties to the end consumer**, supporting market creation and improving demand for the solution. Microfinance institutions allow individuals or communities to get access to services that would require high upfront payments by paying in several installments over time. The microfinance institution pays the seller, providing an additional revenue stream for the social enterprise. This is the approach retained by the Water Equity funds, as explained in the next chapter.

Donors increasingly test **results-based financing** approaches, where a proportion of the funding is linked to the completion of pre-specified outputs or other performance targets. Those can be program-for-results modalities or social bonds or social incentives for instance. Although this approach *can* generate higher impact and improve the performance of a project, it is not demonstrated that this type of instrument attracts more private investors. Indeed, this model supports the idea that the company that is remunerated in this way needs subsidies, which will not make it more attractive to commercial investors.

Key support elements that SWE need most

To conclude and to provide **guidance to keep on supporting social enterprises in future projects**, we find that entrepreneurs mostly need:

- Business training for very early-stage business ideas, **pilot funding** to start testing and developing their ideas, with **capacity building** to help them initiate a company and **mentoring** during the initial phase.
- For slightly more advanced companies, **ad-hoc coaching and targeted technical assistance** throughout the course of the project to grow, scale and address specific challenges that can arise. Growth capital in the form of equity or convertible notes (SAFES, KISSES) to grow to a more stable size.
- There are a set of **other tools**, in additional to regular business training, where SDC projects can support entrepreneurs, including R&D support; consumer tests; field studies, social marketing activities. The annex 7.6 illustrates the variety of topics covered in an acceleration program where companies need ongoing support.
- **Financial support** suiting their needs: depending on the stage of the company or specific needs (investment or cashflow), entrepreneurs need a wide range of instruments.
- **Connections to the ecosystem, at different levels**. A key aspect is the relation with public authorities, as entrepreneurs experience uncertain regulatory climate and face threats including centralized networks extending into their service areas at subsidized prices; or even competition from low-cost alternatives, including NGOs. In addition, entrepreneurs also benefit from interaction with investors who can help them to grow their businesses.
- Support to **measure and report impact** – in this space, providing impact figures is key, or when entrepreneurs look for funding from impact investors. Implementing partners could and should support entrepreneurs in establishing simple but effective impact measurement systems and assess their performance accordingly.

5.3 Potential for further uptake, mainly in the financial sector

The level of engagement of the financial sector for social entrepreneurship in WASH is low – this sector remains difficult and does not offer the financial return that is attractive to commercial investors – including impact investors. (Q7)

The global impact investment market is growing despite the pandemic. There is a growing sophistication in impact measurement and management practices. GIIN estimated in 2020 the total size of the impact investing market at USD 715 billion. Top sectors for capital allocation are energy and financial services. In asset management, ESG and sustainability-themed funds are also a growing trend. Investors poured USD 20.5 billion into this kind of funds in the last three months of 2020 only. These figures point to a growing engagement of the financial sector in impact investment. However, the Global Impact Investment Network (GIIN) estimates that, in 2020, 85% of impact investors have market-rate or close to market-rate objectives (at least double digit), compared to 15% funders that put impact first[32]. The latter tend to be foundations, development agencies or philanthropic donors. In 2017, the ratio was 84-16%, and in 2014 82-18%, suggesting a declining trend for impact-first investments. Social entrepreneurs, especially in difficult sectors such as WASH, would rather fall in the "impact-first" category, as they require patient capital to grow and scale their business and can definitely not offer market-rates when serving the BoP. Few business models have yet been proven in the WASH sector (many are hybrid models where additional and more traditional revenue streams cover the costs of services that might be offered for free to the end beneficiaries), engagement from the financial sector therefore remains low and is likely to remain so over the short and medium-term. To increase this engagement, ODAs should seek to create and support multistakeholder initiatives that include investors more closely and support identifying where private sector development can lead to increased impact while offering some returns.

In the WASH sector, one can distinguish between four main types of actors financing social enterprises (a more comprehensive description of the strategies and approaches of SWE financing stakeholders are provided in annex 7.7):

Type of actors	Main approaches	Most active stakeholders
Donor agencies	Technical assistance to SE; finance through different instruments; networking; governance Incubation programs and challenges funds (nexus with other sectors, in particular food or energy)	SDC, GIZ, SIDA, USAID
Wealthy individuals, family offices	Funding (angel investors), mentoring	N/A (for confidentiality issues)
Foundations	Technical assistance, networking, funding	Bill and Melinda Gates Foundation / Stone Family Foundation / Conrad N. Hilton Foundation / Vitol Foundation
Specialized WASH sector funds	Funding usually coupled with technical assistance	Aqua for All, WaterEquity, Danone Communities

Table 6 Four main types of actors financing social enterprises including the most active organizations and their approach (based on several interviews and desk review)

The potential for large-scale dissemination and uptake via private investors is low as of today – both the stated of the financial market and the state and interest of the entrepreneurs contributes to this situation. (Q8)

As pointed out, most of the capital going into social entrepreneurs in the WASH sector comes from a limited set of actors who tend to finance early-stage and high-risk ventures. Several **donor agencies** have worked in the space of incubation, trying to build a pipeline of investable opportunities that will be interesting for commercial investors.

At the level of the portfolio of projects, we find that very few companies supported through the different programmes have attracted **follow-on investment**. The most successful ventures have received additional grants; or have raised additional capital – mostly in the form of debt – from existing investors. Few investors supported by the different projects have actually demonstrated product-market fit or gained a critical mass of clients or revenues that would attract commercial investors.

Entrepreneurs themselves are not necessarily looking for follow-on investments in the form of debt or equity. Some recognize the difficulties to attract this kind of capital, as well as the time and resources to invest to raise funding. Several entrepreneurs from the sample reviewed indicated that they were rather focusing on strengthening their businesses than going for more funding. In the same way than commercial investors are not yet attracted to the WASH sector, entrepreneurs are also reluctant to enter the arena. Investors will ask entrepreneurs not only to demonstrate that they qualify for an investment, but also how they will use it.

[32] Global Impact Investing Network (GIIN), 2020, 2020 Annual Impact Investor Survey

Many WASH businesses lack **pre-requisites**, such as clear governance structures, comprehensive business plans, strong brand or even compliance with regulations. There are a few actors, in particular accelerators focused on WASH, that could help to prepare them for applying for and receiving investments. This support could come from donor agencies supporting entrepreneurs at the phase of acceleration. On another level, entrepreneurs can experience some discouragement over time without the adequate business partners. Being profitable or even breaking even in the WASH sector is notably difficult, even more so when serving the BoP. Helping entrepreneurs see the different support structures along the entrepreneurial ecosystem development path could also equip them to continue growing.

Continuity and management are key aspects that should not be overlooked. Many donor-funded projects focus on the funding and short-term impact, but the development of infrastructure needs more than this, including: recurring income, technical skills and supply chain support. Infrastructure needs maintenance and repairs, which tends to be overlooked. Successful WASH projects need to have a clear strategy for ensuring that the right institutions, resources, and incentives stay in place to keep it self-perpetuating. Projects should encompass all dimensions to ensure a lasting effect of the outputs.

5.4 Conclusions on SWE Portfolio

While there are outstanding examples of social water or green entrepreneurs, the overall promise or hope put into water entrepreneurship turns out to be more challenging than anticipated about 10 to 15 years ago when development actors started framing and advancing the agenda of promoting social entrepreneurship in WASH. There are several reasons:

- Acting and marketing on water-related services and products almost always gets influenced by the strong **public interest**, the role of government authorities or vested interest by the state. Usually, the state has the control over water resources and its use, and has the responsibility to provide water services, but in many countries lacks the funding to ensure infrastructure and services for all
- Despite being a good of such vital importance, the **externalities** of poor water and sanitation services – be it on the health of people through poor water quality, or on the environment through lack of wastewater treatment – often don't make a sufficient case to get the willingness to pay at a relevant level.

The following overview elaborates on the current social, technical, economic, environmental, political, and financial justification of GPW's engagement with SWE, and on the opportunities and potential risks and uncertainties in view of potential future phases (Q11).

Strengths	Weaknesses
• Early involvement in the WASH sector where SDC has supported the development of innovative approaches and created funding mechanisms and support for ideation and incubation • Most projects achieved intended outputs (including ongoing project) – but not necessarily the outcomes targets • A few SWEs supported through the different projects have achieved significant impactand have raised follow-on investments • Projects created an increased number and quality of job opportunities, often with value added effects on family and through own consumption. • Less dependence from public sector (e.g. in Lebanon crisis) through self-initiative and promoting community mobilization	• Multiplicity of objectives pursued made it difficult to be targeted and create the impact intended • Often insufficient engagement with the ecosystem which hampers potential for systematic and lasting effects • Very few SWEs have proven sustainability and are delivering a significant impact • Lack of geographical focus – preventing from developing ecosystems and creating strong ties with local partners • Lack of synergies between projects / lacking the portfolio approach • Implementing partners did not always have the necessary experience and know-how to perform part of the activities • Project timeframes have been constantly underestimated • Some business ideas are not environmentally sound, such ideas must be scrutinized already in ideation phase

Opportunities	Risk and Uncertainties
• Few other international donors are active at the intersection between WASH and entrepreneurship (GIZ; SIDA, SNV, USAID, (FCDO) • Capitalize on work invested for 10 years already on ideation/incubation • Keep on building the ecosystem and move towards next phase – acceleration • Recenter efforts on selected regions • Work through already established businesses	• The potential for uptake from private investors is low – impact investing looks for market-rate return and very few social entrepreneurs become investment ready • Companies supported cannot make it much longer after SDC support – funding will not create long-term intended impact • Companies supported through SDC funds do not find any additional source of support and financing – use of funding has not been efficient

The added value for SDC /Switzerland to continue the engagement with SWE is:

- SDC's GPW has gained more than 10 years of experience in the field of SWE and started, established as well as discontinued partnerships with important Swiss and international implementing partners
- Switzerland is host of a strong and vibrant community and network of impact investors, a high number of high net-worth individuals as well as philanthropy foundations. This unique ecosystem[33] stands out internationally and is an opportunity for SDC to leverage further for its own goals
- Social entrepreneurs as well as the private sector must be considered as a complementary partner to the partner government and NGOs for reaching the SDGs – the question is not if but how to engage with them

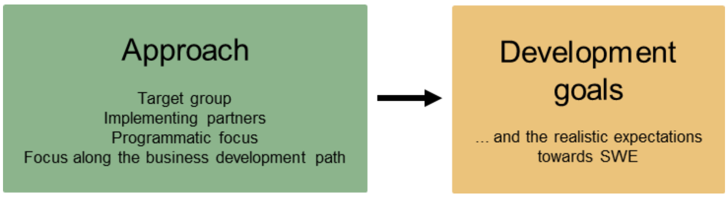
[33] See for instance the Swiss Development Finance Declaration, weblink

6. Recommendations

The SWE portfolio has grown over time and offers both a wide range of learnings and heterogeneity. To shape the future SWE portfolio, the GPW needs to start thinking from the impact level backwards to craft a stringent portfolio. The initial framing questions which GPW needs to reflected upon are (in this order):

1. What **development goals** does SDC want social water entrepreneurs to contribute to? (Is it SDG 6 only or what other SDGs, e.g. on decent work and improved job opportunities, or more circular economy and resource efficiency, or youth empowerment and reducing inequalities?) And what are **realistic expectations** towards social water entrepreneurs with regards to these development goals?
2. What are the primary **target groups** to benefit from the interventions, and what **changes in behaviour** (including capacities, know-how) does SDC want to achieve among these target groups?
3. What are the established **partnerships**, **achievements**, and **implementation modalities** the GPW can build upon?

Our recommendations are structured along the logic presented here, starting with defining the goals (right side) and moving on the strategic and operational questions of the approach to reach these goals (left side).



6.1 Goals and expectations towards social water entrepreneurs

A certain homogeneity at the level of **development goals** (impact level) of SWE projects allows for synergies (know-how management across projects) and eases the "branding" as a SWE portfolio, while on the other hand, with a narrow focus in terms of goals, promising opportunities for combining different impact levels (water e.g. with youth empowerment, circular economy, etc.) may be missed.

With reference to the current **GPW Strategic Framework 2021 to 2024**, the promotion of social water entrepreneurship is related to:

- GPW's strategic component 1 "Water, sanitation and hygiene for people" in cases where the SWE supported (and entrepreneurial ecosystems or demand strengthened) contribute to achieving SDG 6.1 (water) and 6.2 (sanitation)
- GPW's strategic component 2 "Water, planet and prosperity" in cases where SWE supported (and entrepreneurial ecosystems or demand strengthened) contribute to achieving SDG 6.3 (water resource quality), 6.4 (efficient water use), and 6.5 (integrated water resources management)
- GPW's strategic component 4 "Water voices" in cases where young social water entrepreneurs are provided a platform to develop innovative water solutions and thereby integrate themselves into the water governance system (strengthening voices of women and young people, their integration into political dialogue and processes)

To support defining SDC's **expectations towards SWE**, Table 7 elaborates on the relevance of SWE to contribute to solving the most important WASH challenges. The focus here is on the **GPW's strategic component 1 "Water, sanitation and hygiene for people"** i.e., on SDG 6.1 (water) and 6.2 (sanitation) while entrepreneurs related to water for food (hydroponics), irrigation or similar are not considered here. The list may not be complete and exhaustive.

Important WASH challenges …	… and how can SWE with a viable business model contribute to solving these challenges – or not
Inclusive access to service Ensuring **inclusiveness** especially **access for rural, poor** and **marginalized communities** in rural, urban and peri-urban areas	+ entrepreneurs may – in the interest of creating social and environmental impacts – focus on customer segments with leverage (municipalities, philanthropic donors, NGOs), *which however means*: no mobilization of private funds, dependent on change of strategy by NGOs etc. - entrepreneurs may – in the interest of a viable financial model – focus on customer segments with higher income levels. This may or may not have positive impacts on vulnerable communities over time (depending on the entrepreneurs' willingness and capability to offer the products/services to BoP as well)
Behavioral change Improving WASH standards often requires a change in **behavioral change** e.g., to shift from open defecation to using and paying) for a latrine	+ entrepreneurs understand and can build their business ideas on their understanding of the local context and needs - entrepreneurs lack the resources (scale of outreach required, endurance for lasting behavioral change required) to instigate the necessary behavioral change
Reliability of service WASH service improvements require **reliable** and thus **sustained service delivery**, i.e. if the system is operated and maintained properly, if the expected benefits are visible, if cost-recovery mechanism are in place	+ entrepreneurs may have a more customer-centered, service-oriented business model which may outperform existing market players (e.g. public utility) in terms of reliability of service
Cost-recovery in service delivery WASH services are **capital intensive** which make **cost-recovery** difficult; tariffing and political interference endangers financial sustainability	+ entrepreneurs may be stronger in recovering costs as long as there is no excessive political interference - public agencies or entities may have preferred access to public funding, to finance capital investments

Table 7 Relevance of social water entrepreneurs to contribute to solving WASH challenges (+ means positive, - means negative contribution)

Although the actual success of SWE will vary across concrete cases (how it is done, the team behind, the way of funding, etc.) and depends on the ecosystem context (demand, legal framework, support network, talent etc.) the overview shows that the **comparative advantage of SWE compared to the public sector with regards to reaching SDG 6.1. and 6.2 is at least ambiguous** and not clear.

This comparison suggests that any SDC investment in the promotion of SWE should more strongly be founded on the actual analysis of needs at the national and regional levels, to gather an **evidence base to decide for which challenges SWE offer a "better approach" compared to public service providers**. This will allow to identify more systematically those areas, where impact at scale and inclusion of vulnerable communities is more likely.

Generally, GPW's current strategy to consider SWE only as **complementary solutions** seems reasonable, especially when focusing on closing the access gaps for the most marginalized and underserved communities.

6.2 Approach to promote social water entrepreneurs

6.2.1 Focusing on acceleration

As stated before, the GPW's latest efforts have focused on the ideation/incubation stage, that is, support very early-stage ventures with technical assistance and in some cases funding. Other projects have supported acceleration efforts with mixed results.

Beyond 2021, we advocate the **GPW should focus mainly on acceleration efforts** coupled with either i) continued and intentional **activities to build a network of investors** or with ii) a reserve of **capital for follow-on investments** to help the accelerated companies to grow.

This recommendation is based on the following reasons:

- First, GPW has worked on establishing social enterprises and strengthening ecosystems over the last 10 years, supporting enterprise creation from scratch. This is time and resource intensive and has high failure rates. Supporting acceleration efforts would **capitalize** on all the work previously done along the business development path (ideation, incubation, acceleration scaling) and SDC's contributions in the WASH / green sector so far.
- Second, there are not many initiatives (accelerators, specialized funds) that could keep on bringing much needed support to the entrepreneurs to keep on growing and ultimately delivering large-scale impact. Other actors, including donor agencies, are also working on challenge funds to support nascent ideas. A more targeted GPW funding focusing on **acceleration+** (+ being either building an extended network of funders or reserving follow-on investment capital for the accelerated companies) could fill a gap.
- Finally, it is very difficult to prove the **cost-effectiveness** of incubation/ideation efforts. Focusing on early-stage ventures is high risk[34] and it is to be expected that objectives and outcomes from the projects are not met. There are only few social entrepreneurs able to prove their business model, establish a steady revenue stream or even attract external capital. Targeted efforts would provide easier-to-measure and more **compelling arguments** for the work performed and the impact created.

There are basically three ways to work on acceleration initiatives:

- GPW could **keep on working through project implementers to accelerate selected social enterprises** which were supported through previous projects, with the objective to increase the impact for communities. This approach would need a more selective process of the SWEs supported through the different projects. This would further build on indirect investments already made in those social enterprises, pool from an existing supply of social enterprises who have proven their business model to a certain extent and provide them with support to grow and scale. It is worth noting though that few companies come out as an acceleration program having scaled massively, both in terms of impact and financially. As comparison, a fund that invests primarily in startups sourced by 6 globally leading acceleration programs (sector- focused and in highly developed countries) ran 50+ acceleration cohorts for a total of 600+ companies over the course of 4 years. Of those, a diverse group of 10 performers comprised 66% of the gains.[35]
- GPW could adjust its strategy and **support established, sustainable social enterprises** with potential to grow and scale. At country or region level, GPW could identify small and medium sized enterprises, sometimes family-owned, that have been operating for a few decades. Therefore, these SMEs would be sustainable, impactful and rooted in local ecosystems. The rationale for investing in those companies would be to reach **higher social impact targets** and build stronger case for the benefits or added value of SWE overall. In addition, once the company achieves a certain degree of financial sustainability and scale, they could design their solutions down to serve the BoP, once benefiting from the improved cost-efficiency at scale, as mentioned in chapter 5.2. GPW could shape projects supporting this kind of social enterprises with higher amounts and stronger support. Nevertheless, this approach will be resource-intensive, as family-run businesses would require higher investments (approx. USD 5 to 20 million per company).
- Ideally, GPW would provide this budget as an **anchor investor in a fund** set up to support systemic solutions that provide safer and more inclusive access to water and sanitation. The fund will work to raise additional millions from other donors to invest and work with those existing, sustainable and impactful businesses. Main financial instruments would **shift from grants to equity or debt**. Anchoring fund managers in this area would allow to bring stronger investment capabilities and targeted technical assistance to the selected companies over a longer period of time (7-15 years). The fund(s) will focus on selected geographies with dedicated local teams that can establish true linkages with the local ecosystem to adequately link the

[34] Failure rate of start-ups is 90%, National Business Capital and Services. "2019 Small Business Failure Rate: Startup Statistics by Industry"

[35] Source: SAGANA, due diligence on a fund performed in 2019. The figure comes from the analysis of the portfolio of previous funds managed by the same organization.

entrepreneurs to other players. The fund will be a central actor in the ecosystem and, recognizing that social entrepreneurship alone is not the only solutions, will help to participate in strengthening governance and providing the right incentives for utilities and service providers to become more efficient.

Ultimately, investing in some successful companies and working with them over a longer period of time would help to strengthen the business case and attract more private capital to the WASH sector, either to invest in the existing portfolio companies or support the set-up of additional funds, creating more impact at a large scale.

6.2.2 Geographic and bottom-up focus

As an actionable next step, given GPW's limited resources, **we recommend targeting some selected countries or clusters of countries** (option 1 above). The water sector presents specificities based on the local context (interlinkages with public sector; ease of doing business in these countries and dynamism of private sector, differences on rural or urban context, among others) that strategies successfully implemented in one geography may not be replicated successfully in another geography. Despite the differences in cooperation modalities between South/East Cooperation and Global Cooperation within SDC, potential synergies at the national levels should be considered because the promotion of entrepreneurial ecosystems is so important and must be **rooted in a continuous and long-term engagement with national partners**. The GPW should seek to gain deeper understanding of selected contexts, based on SDC's priorities countries, to create more targeted approaches.

GPW should seek to gain a deep **understanding of the WASH issues at stake in those specific geographies** as well as a full panorama of all actors involved (including funders and investors). Based on this deep dive, GPW will be able to develop a 10-years or 30-years horizon vision for the WASH sector in those selected geographies and therefore to choose the right intervention strategies to address them.

6.2.3 Interlinkages with the public sector and the NGO sector

In terms of linking SWE, entrepreneurial ecosystem development with the public sector and government authorities, we have two key recommendations for the ongoing projects as well as for any future GPW project promoting SWE:

- **Embed the projects into relevant sector governance system and in multi-stakeholder partnerships**: In the overall portfolio, the most successful projects in terms of lasting impact appear to be those with an intentional multi-stakeholder approach in the specific sector (RRR in Kampala) or with a strong engagement with the entrepreneurial ecosystem. In the case of SUPW, the lack of embedding it in the water governance system was a negligence (issues of water availability due to scarcity). The choice of the appropriate partners and – where possible – also SDC's support including from the Swiss ambassador on the ground are key factors. The current implementing partners (cewas, YWS) do not have the necessary "standing" and experience to do this job.
- Build upon and further explore **interlinkages between SWE and public water service providers or authorities** (water utilities, water ministries) rather than refrain from it. The cases found indicate that SWE are complementary services or products or creating new markets but not competitive to public services. There are multiple ways of strengthening that linkages, for instance to:
    - Actively identify and showcase the mutual benefits of SWE and the public water services within **public-private partnerships**. For instance, the water kiosks run by Swiss Fresh Water in Senegal are not competitors to the public service as in the areas they operate the customers can't consume the tap water. As the water kiosk operator pays the tariffs to the public utility (in cases of the kiosk being located within its service area) the utility has the revenue and the kiosk ensures an affordable service coverage. Another example mentioned in an interview is from Ethiopia where a utility entered a PPP to distribute HWTS (filters) to their own customers to ensure high water quality at the tap. Such mutual benefits within PPP could be further exploited and scaled-up.
    - Work with "**intrapreneurs**" (RRR Lima on sludge reuse) i.e., individuals currently working at a government agency, but which are interested in an entrepreneurial idea. This model could be further explored in other occasions (where sector is highly regulated, no existing businesses).

- Promote SWE **innovations** into the service modality of established water service provider
- Advocate for opening **public procurement** for (often small) SWE

With regards to coherence of SDC's **work on SWE and NGOs** it seems relevant to further **assess and monitor any potential incoherence**, e.g., in cases where NGOs supported by SDC (mandates, programme contributions) may provide products or services to end-beneficiaries at no cost while at the same time SDC promotes market development and SE development which suffer from distorted markets due to NGOs providing products at no cost.

6.2.4 Project design, partnerships, and modalities

Several further recommendations are related to the project design, the partnership and implementation modalities:

- Project **timeframe**: projects timeframes have been underestimated. It takes time to build functioning businesses. SDC is bound to short-term interventions (4-years programming and rules on allocating funds) but it needs to look beyond and find mechanisms to support it over the longer term.
- Focus on specific **geographic zones** i.e. countries or clusters of countries to ensure a sufficient effect on the entrepreneurial ecosystem including the government and the actual market. Locality matters. Some key criteria to take into account would include (not exhaustive list):
    - Mapping of all actors involved in the WASH sector (public authorities, private sectors, multinational organizations, NGOs among other) and their role
    - Nature and size of gaps along the WASH solution spectrum that are not addressed by existing actors, e.g., public sector of large utilities
    - Presence of Swiss cooperation at national or regional level; presence of partners with established linkages to Swiss cooperation actors (to ease cooperation)
    - Existing interplay between public and private actors in the WASH sector, at the level of policies, strategies as well as within water governance institutions and financing mechanisms
    - General ease of doing business and dynamism of the private sector; context specificities (rural vs urban), among other
- Favor modalities that seek to **leverage local solutions** to address the access gaps for the most marginalized and underserved communities. Bringing in Swiss technologies or pre-packaged business models into the global South may result in increased transaction costs and lower cost-efficiency.
- Establish a **structured knowledge exchange** at the SWEs portfolio level; ideally, there would be synergies between the different projects where each partner has a complementary role. There should also be a space for implementing partners to share lessons learned on the project and ensure mutual understanding and added value for both the entrepreneur and the investor.
- Seek **synergies with other donors and funders** and establish joint programmes, strive for a "Global Platform for excellence in Social Water Entrepreneurship" which the GPW already is today in a way. SDC could partner with other organizations (other donor agencies, development banks) to launch investment instruments and acceleration/capacity building programs dedicated to supporting solutions for access to safe water and sanitation. A diverse set of partners with complementary capabilities would be uniquely positioned to provide specific technical assistance and investment capital to growing companies promoting SDG 6 and catalyzing the sector's ecosystem at scale
- **Leverage on the experiences made at national and regional level**, especially where ecosystem networks have been established in the last 10 years, i.e. continue its support with a focus on specific countries to also tackle systematically the build-up of the conducive ecosystem. **Expanding cewas'** current incubation focus into the ideation and the acceleration phase seems to be well justified.

- For the **acceleration programme**, GPW should partner with structures that can demonstrate know-how and a proven track-record on social enterprises acceleration, ideally in the WASH sector
- **Impact measurement** is a key component of a technical assistance package. Entrepreneurs can have difficulties measuring their impact, while measuring and sometimes even monetizing the social value can help to strengthen the business case and attract private investors. (i.e. not necessarily the amount of kiosks created, but also monetizing the savings from time spent collecting water; or not only the amount of toilets built, but the reduction in disease/improvement in health). GPW should seek to promote tools to do so.
- Build ties with the **impact investing community**: a key objective of previous projects was to leverage follow-on investment; however, the community of impact investors active in WASH is small. A focal point could be to map the landscape of active investors in this space and their key focus, and look how to integrate these actors in the projects that are supporting social entrepreneurs

6.2.5 Financing mechanisms

Related to financing mechanisms and structures, we have the following recommendations:

- Any **unintended effects** of the financing instrument used must be monitored in a risk management process, namely that grants can create dependency; loans without proper management for very early companies can lead to bankruptcy through incapability of paying the interest payments and/or pay back the principal). “Grant seeking behaviour” by entrepreneurs should not be stimulated, they should invest time in generating and diversifying revenue streams.
- Understand how to **incentivize other instruments**, i.e. create revenues streams through social impact bonds for instance and ensure proper **evaluation mechanisms** (depth of the due diligence process; using the right kind of instruments depending on the company’s situation).
- Contribute to **more structured financial support** e.g. by working through funds: funds can bring targeted support /technical assistance to selected companies for a longer period of time (7-15 years); bring additional capital from other investors and be able to truly establish working relationships with public authorities. Also consider more comprehensive PPP financing structures.
- Provide **funding for a lower number of companies** but offer a more targeted support suiting their needs, either technical funding or financing instruments
- Explore the **potentials of output-based financing to promote entrepreneurial spirit and innovation**. The assumption is that output-based financing stimulates a flexible and efficient output delivery by the mandated entity and is especially relevant in development projects where outputs consist of a substantial hardware component, for instance toilets or water connections.[36] Combining incubation / promotion of entrepreneurial ecosystems with output-based financing of development outputs may be an interesting approach to explore. Metrics would have to be found to measure impact-relevant outputs in an efficient and robust manner.

[36] See for instance the evaluation of a large DFID-financed WASH Payments by Results (PbR) programme: ePact (2018) – WASH Results Programme Evaluation – Synthesis Report vol. 1.1. Weblink: https://www.gov.uk/research-for-development-outputs/wash-results-programme-evaluation-synthesis-report

7. Annexes

7.1 Overview of six projects

In the following chapters we provide an overview of the six projects.

7.1.1 cewas Middle East Programme

<table>
<tr><th colspan="4">Key information on the project</th></tr>
<tr><td>Project's name

Fostering regional entrepreneurial and market development for SSWM in the Middle East (cewas Middle East Programme)</td><td rowspan="2">Duration

2016 – 2018 (phase I)

2019 – 2021 (phase II)

Total</td><td rowspan="2">Overall budget

EUR 1.54 m

CHF 3.33 m

CHF 5.18 m*

(* CHF/EUR = 1.2)</td><td rowspan="2">SDC contribution

EUR 0.77 m (50%)

CHF 1.66 m (50%)

CHF 2.58 m*</td></tr>
<tr><td>Implementing partner

cewas

(Swiss non-profit association founded in 2011)</td></tr>
<tr><td colspan="4">Overall goal (Phase II)

A thriving entrepreneurial ecosystem for Sustainable Sanitation and Water Management (SSWM) in the Middle East that enables the initiation, development and implementation of innovative entrepreneurial solutions to ensure the availability and sustainable management of water and sanitation for all.</td></tr>
<tr><td colspan="4">Country / region

4 countries/regions in the Middle East: Palestinian Territories, Jordan, Lebanon, Northern Iraq</td></tr>
<tr><th colspan="4">Overall objectives and targets</th></tr>
<tr><td colspan="2">Expected outcomes

Phase I

Outcome 1: Strengthened local capacity in water, sanitation and resource management with special focus on emergency response. (Lebanon, Jordan and Northern Iraq)

Outcome 2: Increased employment opportunities in water, sanitation and resource management, which contributes to diminishing vulnerability. (Lebanon, Jordan, Palestine)

Outcome 3: Strengthened role of private water and sanitation products and service providers in the region, who initiate and implement innovative and sustainable projects.

Outcome 4: The initiative of cewas Middle East is self-sustaining.

Phase II

Outcome 1: Enabling Environment: Key ecosystem actors (decision makers, enablers, financing entities) engage to create and enhance the regional entrepreneurial ecosystem for SSWM.

Outcome 2: Demand for SSWM: Increased demand for SSWM solutions by governmental, non- governmental and private actors in the Middle East

Outcome 3: Innovate Entrepreneurial Solutions: Entrepreneurs are enabled to develop, sustainably implement</td><td colspan="2">Expected outputs (phase II only)

Output 1.1: The awareness and interest of key SSWM entrepreneurial ecosystem actors (decision makers, enablers, financial entities) is raised by a targeted outreach campaign highlighting the demand for SSWM solutions, market potential, young SSWM role models in the region.

Output 1.2: Key ecosystem actors are capacitated and engaged in a regional dialogue (incl. workshops) to improve ecosystem support structures, enhance the institutional framework and collaborate more closely.

Output 1.3: SSWM ecosystem tools (financial support system, ecosystem development methodology, marketable SSWM solutions for the Middle East) are developed and introduced to key ecosystem actors to provide enhanced services and support structures to entrepreneurs and as a base for policy dialogue among decision-makers.

Output 2.1: Digital media, audio-visual storytelling and classic journalism featuring start- ups and innovative SSWM solutions raise awareness among market players.

Output 2.2: Government officials, key practitioners and private actors working in the development and humanitarian sector are trained in SSWM and recognise the importance of entrepreneurial solutions.

Output 2.3: Role model entrepreneurs and key actors of the sector pair-up to implement innovative solutions that can be used to showcase and promote water entrepreneurship.</td></tr>
</table>

and scale their SSWM solutions on a local, regional and international level	Output 3.1: Future entrepreneurial leaders are identified and supported among youth and women at environmental departments of leading universities and other organizations. Output 3.2: cewas Start-up programmes and coaching enable entrepreneurs to develop and implement high potential SSWM ideas. Output 3.3: Entrepreneurs are linked and matched with customers, partners, investors, accelerators and other enablers to scale their business. Output 3.4: Physical and virtual networking activities among start-ups and practitioners foster the growth, international exposure, knowledge exchange and impact of the SSWM entrepreneurship community.
Target groups Phase I: direct target group: 420 people plus 28'000 WASH practitioners, namely employees from, civil society organizations, local and international NGOs, universities and governmental agencies, municipalities, local cooperatives and private businesses that work directly as emergency; responders or service providers with refugees and displaced populations in the WASH and solid waste sectors; young professionals, entrepreneurs, small and medium sized businesses, and organizations that seek business support in the sustainable water, sanitation and resource management sectors Phase II: direct target group are a total of 600 individuals from around 70 organizations, namely incubators, financing institutions, governmental agencies, local and international NGO, private businesses in WASH sector, students and universities, existing SSWM role models, business experts from the mentorship network, journalists, influencers	Key partners (and roles) Phase II Overall coordination and implementation of the programme will be cewas' responsibility, assisted by over 15 regional and national implementing partners, with around 50 supporting partners, who collaborate in design, planning, implementation and monitoring and evaluation. The programme is supported by a strategic advisory committee, the cewas mentors, different pool of experts from the WASH and business communities and support from additional financing partners.
Implementation modality Cooperation with national implementation partners in the four countries to organize and deliver training programmes Cewas ME has built up a permanent presence in the ME region and network of partners. Since phase II, strongly focused on building a functioning ecosystem with institutions (INJAZ Jordan, PPU Hebron) which can function as incubators in the future.	Type of support offered to entrepreneurs 6 SSWM trainings (technical and governance aspects of SSWM), with one major (2,5yrs) training in Erbil (Iraq) 1 regional and 4 country-level, 1-year core entrepreneurship programme with a total of 15 teams Two toolsets developed (innovating business models, market readiness) Strategic business development coaching Up to 120 SWE which have benefitted from the cewas ME programme up to date
Key results up to date	
Social entrepreneurs Up to 120 SWE teams which have benefitted from cewas ME programme up to date through trainigns, coachin or networking (interview 1.2.2021 cewas). By mid 2020, a total of 27 entrepreneurs went through one year incubation programme in Jordan and Lebanon, of which 18 male and 9 female.	End users / beneficiaries 50% of all start-up businesses are targeting vulnerable populations as beneficiaries, customers or employees. 48% of all capacitated start-ups are female. (Progress Report 2020, p. 15)

7.1.2 Young Water Fellowship Programme

Key information on the project			
Project's name Young Water Fellowship (YWF) Programme **Implementing partner** Young Water Solutions (international NGO, based in Brussels, founded in 2015)	**Duration** May 2018 – Oct 2021 * (3 years)	**Overall budget** EUR 960'165 (CHF 1.15 m)	**SDC contribution** EUR 480'083 (50%) (CHF 0.58 m)
Overall goal Young people are largely recognized and empowered as agents of change in the water sector contributing to sustainable water resources management and universal access to safe and affordable water and sanitation services in vulnerable communities.			
Country / region Global; regional editions in East Africa (Tanzania, Uganda); West Africa (Senegal, Ivory Coast)			

Overall objectives and targets	
Expected outcomes	**Expected outputs**
1. Young people are attracted to the water sector and acquire the necessary **tools and skills** to set up social enterprises that tackle water-related challenges integrating women, other young people, the poor and disadvantaged. 2. Social enterprises led by young entrepreneurs that **effectively offer sustainable solutions** to increase access to safe water and sanitation services as well as sustainable water resources management are initiated. 3. Lessons learned and concrete results obtained from innovative initiatives led by young people are used to create a **long-term strategy to scale-up the YWF programme**, as well as to nourish **knowledge exchange and policy dialogue** at various levels, leading to a lasting involvement of young people in efforts to provide solutions to water related challenges.	1.1 Annual campaign to encourage young people to be actor of changes in the WASH sector. 1.2. Two in-person global trainings in social business, IWRM, WASH, human rights to water and sanitation and gender delivered, as well as one Acceleration training for alumni. 1.3 Three in-person national/regional trainings in social business, IWRM, WASH, human rights to water and sanitation and gender delivered, and capacity is built in two local incubators in Africa for future training delivery. 1.4: Fellows' initial business models are enriched with gender and BoP approaches. 2.1: Young entrepreneurs receive financial support through seed-funding for the initial phase of the social enterprises. 2.2: Young entrepreneurs receive continuous technical support through coaching and mentorship by senior water and business experts. 2.3: Young entrepreneurs increase their supporting networks in the water and business sectors for the sustainability and scaling up of their social enterprises. 3.1: Lessons learned, best practices, and concrete results from the social businesses initiated by Fellows are synthesized in policy messages and guidelines and shared with public and private decision-makers to increase opportunities for young water entrepreneurs. 3.2: Knowledge sharing sessions with organizations and stakeholders active in the water/entrepreneurial ecosystem are organized. 3.3: Operational mechanisms for programme replicability as well as future editions are established and youth capacity to run the programme is increased, guided by experienced water professionals.

Target groups	Key partners (and roles)
Direct beneficiaries: young social entrepreneurs + end users of the solutions developed Indirect beneficiaries: SE's teams (at least 2 person per company)	cewas (deliver training on SE, especially global edition) Water Youth Network (mentor-matching process)
Implementation modality	**Type of support offered to entrepreneurs**
YWF sets up the global and regional editions; it selects the fellows and works with them throughout the training. On-site trainings are supported by a range of partner (led by cewas) and mentor-matching is provided to entrepreneurs to keep on supporting them post training.	International edition: 5 weeks on-site training + seed-funding (up to EUR 5'000 per company) Regional or national edition: 10 to 14 days on-site trainings + seed-funding (up to EUR 5'000 per company)
Key results up to date	
Social entrepreneurs	**End users / beneficiaries**
Young social entrepreneurs: TBC (target: 49 (19 at global level; 30 at national regional level); 50% of SE being women)	TBC (target: 30'000, including 50% being women and children)

* a no-cost extension has been requested up to October 2021.

7.1.3 Swiss Bluetec Bridge

<table>
<tr><th colspan="4">Key information on the project</th></tr>
<tr><td>Project's name
Swiss Bluetec Bridge</td><td rowspan="2">Duration
Apr 2011 – Dec 2015 (phase I)
Feb 2016 – Jun 2020 (phase II)
Feb 2020 – May 2024 (phase III)
TOTAL</td><td rowspan="2">Overall budget
CHF 3.91 m
CHF 2.59 m
TBC
CHF 6.50 m</td><td rowspan="2">SDC's contribution
CHF 1.58 m (40%)
CHF 2.34 m (90%)
TBC
CHF 3.92 m (60%)</td></tr>
<tr><td>Implementing partner
Strategos (phase I and II) (Swiss-based consulting firm); Financecontact (phase III) (Swiss-based fund manager)</td></tr>
<tr><td colspan="4">Overall goal
The main goal is to accelerate sustainable access to safe drinking water and sanitation for the most vulnerable in rural and small cities of emerging or developing countries. Swiss technologies and innovation are provided for this purpose.</td></tr>
<tr><td colspan="4">Country / region
Global, focusing on emerging markets</td></tr>
<tr><th colspan="4">Overall objectives and targets</th></tr>
<tr><td colspan="2">Expected outcomes
<u>Phase I</u>
1) A functional mechanism for the identification, selection, co-financing and monitoring / evaluation of pilot business plan projects
2) 60 start-up / SME projects applicants; 6 of them are allocated funds to carry out a pilot
3) 4 start-ups / SMEs with a successful pilot application and private financial commitment
4) Preconditions and partnerships for the subsequent phase are in place
<u>Phase II</u>
1) A growing number of Swiss companies that have benefited from SBB loans are ready to scale up with private funds
2) Foundations to perpetuate the Swiss Bluetec Bridge initiative are laid down</td><td colspan="2">Expected outputs (Phase II only)
• Five new projects co-financed with an SBB loan
• The results of the co-financed projects are documented and monitored during 2 or 3 years
• A SBB label is formalized
• SMEs and start-ups in Switzerland and in emerging countries have developed ready-to-use business models/impact models
• Local communities/local authorities or local entrepreneurs apply for Swiss companies (start-ups or SMEs) ("market pull" counter).
• An initiative co-sponsored by other stakeholders
• The SBTB operational mechanism will be documented and updated so that it can be transmitted at any time.</td></tr>
<tr><td colspan="2">Target groups
Selected innovative start-ups / SMEs
Poor rural populations in developing or emerging countries
Local or regional operators & maintainers of equipment
Financial / private investors</td><td colspan="2">Key partners (and roles)
Cewas (expanding the pipeline in phase I; providing business training to companies in phase II)
Skat (Water expert for technical support)
Swiss Water Partnership (joints conferences and events)</td></tr>
<tr><td colspan="2">Implementation modality
Strategos set up the conditions for the programme: eligibility conditions; selection process; provided some technical support and some co-financing and monitored status; cewas provided business trainings to support entrepreneurs</td><td colspan="2">Type of support offered to entrepreneurs
Interest free-loans of up to CHF 250'000 per company
On-going, demand-oriented support and coaching to entrepreneurs</td></tr>
<tr><th colspan="4">Key results up to date</th></tr>
<tr><td colspan="2">Social entrepreneurs / enterprises
11 companies supported</td><td colspan="2">End users / beneficiaries
1'150'000 people reached in rural areas and small cities through the 11 companies (Target of 200'000 people)
Creation of approx. 840 new jobs</td></tr>
</table>

7.1.4 Rethinking Sanitation Systems: Safe Resource Recovery and Reuse (RRR)

Key information on the project			
Project's name	Duration	Overall budget	SDC contribution
Rethinking Sanitation Systems: Resource Recovery and Safe Reuse (RRR)	Dec 2011 – 2015 (phase I)	TBC	CHF 3.25 m
	May 2015 – Aug 2018 (phase II)	CHF 8.80 m	CHF 3.34 m (38%)
Implementing partner GIZ (Uganda) (German development agency); EAWAG (Peru) (Swiss research institute)	TOTAL	TBC	CHF 7.60 m

Overall goal
To promote and implement globally and at commercial scale recovery and safe reuse models of resources generated from liquid and solid waste streams in order to promote food security, cost recovery in the sanitation sector, and livelihood opportunities, while safeguarding public health and the environment in poor urban and peri-urban areas in developing countries.
Country / region
Global, with target initiatives in Uganda and Peru

Overall objectives and targets	
Expected outcomes	Expected outputs (Phase II only)
1. **Implementation of economically viable business models** increases the scale and viability of productive reuse of water, nutrients, organic matter and energy from domestic and agro-industrial waste streams 1.1 In *Kampala*, a number of economically viable RRR business models are implemented while public health and environmental implications are properly addressed. 1.2 In *Lima*, a number of economically viable RRR business models are implemented while public health and environmental implications are properly addressed.	1.1.1 The legal and institutional framework for private sector engagement in Kampala's sanitation sector is strengthened 1.1.2 Safe and financially sustainable RRR businesses are established in Kampala. 1.1.3 SSP is a widely recognized and used tool for planning, implementation and monitoring within the sanitation sector of Kampala that is applied by RRR pilots and in the project pilot areas. 1.2.1 The legal and institutional framework for private sector engagement in Lima's sanitation sector is strengthened. 1.2.2 Safe and financially sustainable RRR businesses established in Lima. 1.2.3. SSP is a widely recognized and used tool for planning, implementation and monitoring within the sanitation sector of Lima that is applied by RRR pilots and in the project pilot areas.
2. **Safeguard public health** in the context of rapidly expanding use of wastewater, excreta and greywater in agriculture and aquaculture and protect vulnerable groups from specific health risks associated with this pattern of agricultural development. 2.1: Sufficient global and regional Sanitation Safety Planning (SSP) expertise and learning resources widely available to support global scale-up. 2.2: The SSP concept is proved through application at policy and implementation level in high potential countries. 2.3: SSP early adopters are applying, innovating and communicating SSP and catalyzing wider uptake.	2.1.1 SSP training package and a policy roadmap document 2.1.2 At least 6 global level SSP expert trainers and up to 40 trained trainers in at least 2 regions 2.1.3 At least 10 SSP case examples showing incentives for SSP and its application in specific contexts 2.1.4 Online platform established for all SSP resources 2.1.5 SSP activities initiated independently following promotion and outreach 2.2.1 SSP implemented in 3-4 countries in at least 2 sites per country with direct technical support from WHO 2.2.2 Policy and institutional barriers identified in 3-4 countries and priority policy actions implemented with direct technical support from WHO 2.2.3 Policy analysis paper on incentives, barriers and enablers for SSP

	2.3.1 SSP embedded in the operations of approximately 10 early adopters. 2.3.2 Generic SSPs for different typologies of SSP
Target groups Public and academic institutions Private sector, small and medium enterprises Private operators	Key partners (and roles) Uganda: Ministry of Water and Environment, Kampala Capital City Authority (KCCA), Water for People (implementation partners to support RRR business model development), National Environment Management Authority (licensing waste transportation), National Water and Sewerage Corporation (NWSC (monitoring fecal sludge management). Peru: public-private working group with combination of national and international partners, WHO (covered about 80% of outcome 2 on SSP tools and proliferation)
Implementation modality Upstream work with private-public working groups for greater formalization of the sector and to strengthen the legal and institutional framework Attraction, selection and support of few start-ups to receive further training Training and coaching on SSP adaption to both public and private actors	Type of support offered to entrepreneurs Short training on business plan and access to financing plan for participating ventures. No financing
Key results up to date	
Social entrepreneurs / enterprises Uganda: 6 start-up businesses actively supported (pit emptiers formalized by KCCA, briquette businesses) Peru: 5 projects supported in Lima of which 4 are public ventures (municipalities with universities) and 1 remaining active today (effluent reuse for irrigation in Lima, active since 1964)	End users / beneficiaries *To be assessed*

7.1.5 Scaling Up Safe Water

<table>
<tr><td colspan="4">Key information on the project</td></tr>
<tr><td>Project's name
Scaling up safe water

Implementing partner
Antenna Foundation</td><td>Duration
Mar 2015 – Aug 2018 *
(3,5 years)</td><td>Overall budget
CHF 2.34 m</td><td>SDC contribution
CHF 1.57 m (67%)</td></tr>
<tr><td colspan="4">Overall goal
Contribute to the progressive realization of the human right to water in five countries by scaling up the application of Household water treatment solutions (HWTS).</td></tr>
<tr><td colspan="4">Country / region
India, Cambodia, Guinea Conakry, Pakistan, Nepal and Ethiopia (Ethiopia was initially not foreseen)</td></tr>
<tr><td colspan="4">Overall objectives and targets</td></tr>
<tr><td colspan="2">Expected outcomes
Outcome 1: Support the consolidation of 5 to 7 business models that can be replicated globally (horizontal scale up)
Outcome 2: Organization of workshops with water stakeholders to highlight the importance of the role of HWTS business models, aiming to consider the implementation of conducive safe water policies (vertical scale up).</td><td colspan="2">Expected outputs
1.1 To provide support for the business models to be independent in 3 years.
1.2 To monitor and document the activities over the three years and describing lessons learned and providing recommendations based on the experience accumulated.
1.3 Development of implementation strategy and tool for scaling up for the promotion of safe water.
1.4 Production of a generic check list that is compatible with Human Right Handbook, encouraging business to comply Human Right to Water.
2.1 Support the knowledge management process within countries and partners.
2.2 Establish workshops with all relevant actors at different levels to start coordinated national discussion on scaling up safe water.</td></tr>
<tr><td colspan="2">Target groups
Social water enterprises
End users of the solutions developed
Advocacy: Water governance stakeholders in Nepal, Pakistan, India (main implementing partner is FANSA); Ministry of Health in Ethiopia (main partner Aqua 4 All)</td><td colspan="2">Key partners (and roles)
Aqua 4 All (outcome 1: supporting consolidation business model)
IRC and FANSA, in Ethiopia also Aqua 4 All (outcome 2: supporting the advocacy dialogue)</td></tr>
<tr><td colspan="2">Implementation modality
Cooperation with national implementation partners.
Supporting social enterprises in the development of a sustainable market-based approaches
Policy dialogue with FANSA (India and region) & individual country-level partners: organization of workshops, and participation to external panels and conferences advocating HWTS.</td><td colspan="2">Type of support offered to entrepreneurs
Support with monitoring, reviews and strategy development.</td></tr>
<tr><td colspan="4">Key results up to date</td></tr>
<tr><td colspan="2">Social enterprises
7 social water enterprises supported, in three categories: ceramic filters; safe water services in</td><td colspan="2">End users / beneficiaries
3.9 m end beneficiaries in the six focus countries (target achieved by all SE besides by one), including in two emergencies (Nepal, Guinea-Conakry)</td></tr>
</table>

water kiosks; chlorine flasks (target of 7 companies achieved).	Strong female customer base, in the case of Hydrologic 74% female customer of ceramic filters
3 companies have proven the viability of their business models on selling one product	Good outcome in terms of promotion human right to water (based on HR2W entrepreneur's checklist developed by FANSA and WaterLex)

* Antenna in their progress reports refer to this phase as the "second phase" (the first phase "Testing Business Models, 2009-2013), however SDC only funded this "second phase".

7.1.6 Scaling Up Productive Water

Key information on the project			
Project's name	**Duration**	**Overall budget**	**SDC contribution**
Scaling up Productive Water	Nov 2009 – Dec 2013 (phase I)		CHF 5.8 m
Implementing partner	Feb 2014 – Dec 2016 (phase II)		CHF 4.5 m (7%)
iDE	Total	CHF 65 m	CHF 10.3 m
Overall goal Increase smallholder income and water efficiency at global level.			
Country / región (as per ProDoc phase II) Burkina Faso; Honduras, Guatemala, Nicaragua, El Salvador; Kyrgyzstan, Tajikistan; Vietnam (four regions)			

Overall objectives and targets	
Expected outcomes (Phase II) Outcome 1: **Growth of regional initiatives in scale and impact** beyond end of the water initiative support. Outcome 2: Productive water technologies, water tools and market-based dissemination approaches **replicated** at global scale	**Expected outputs (Phase II)** 1.1 Sustainable regional initiatives comprising ongoing facilitation of water **productivity** solutions, profitable commercial **supply chains** and provision of **technical assistance** by a. market creation b. delivery c. technical assistance 2.1 New smallholder productive water **technologies** tested and marketed 2.2 Three water **productivity tools** developed and adapted to regional context 2.3 Market-based dissemination approach is available for replication (PRISM) 2.4 Results are shared through publications, promotional materials and presentations
Target groups Smallholder farmers that benefit from the technology. Vendors of the technology and service providers. Advocacy: Agricultural Development Organizations	**Key partners (and roles)** Producers NGOs/cooperatives
Implementation modality (as per ProDoc) **Regional Initiatives**: test and scale the market-based PRISM () approach to deliver affordable productive irrigation systems to smallholders In Central Asia, iDE (Helvetas) played a role of facilitators. In Central America and Burkina Faso, iDE became an active market player. **Global Initiatives**: support the work of iDE's Technology and Innovation Group on the development of products, water management innovations tools and by attending forums and conferences.	**Type of support offered to entrepreneurs** Testing of the developed PRISM tool to enhance regional initiatives.

Key results up to date	
Social entrepreneurs iDE Producers NGOs/cooperatives	**End users / beneficiaries** Around 26'000 households receive productive water solution in phase I 14'360 irrigation kits sold in phase II (target 17'000-34'000)

7.2 List of documents reviewed

Author	Title	Date of publication
Cewas project		
cewas middle east	Programme 2016-2018. Proposal to the SDC. Version 19.12.2016	Dec-16
cewas middle east	cewas Middle East Programme 2016-18. Justification to the proposed amendment to the contract No. 81043064	Jan-18
cewas	Creating Impact with Water Entrepreneurship. By H. Beutler and J. Hermann-Friede	Apr-19
cewas	Final Programme Report 2016-2018	Apr-19
cewas middle east	Cewas Middle East 2019-2021	Nov-18
cewas middle east	Operational Report 15 Feb 2019 to 31 Dec 2019	Feb.20
cewas middle east	Operational Report 2020	Mar-21
cewas middle east	cewas Benchmarking Tool for MVPs. Draft	Jan-21
cewas middle east	M&E Matrix with reported indicators. Phase II up to end of 2020.	Mar-21
cewas middle east	Overview leveraged funding by cewas middle east. 2019-2020.	Mar-21
cewas middle east	cewas Middle East – Strategic Planning beyond 2021	May-20
Scaling-up Safe Water (Antenna Foundation)		
Agridea and fast4meter	Final Report of the external Evaluation of the Programme, Phase 1	Nov-12
Antenna	ProDoc, technical proposal phase 2	Nov-15
Antenna	Credit proposal 2014-2018	n/a
Antenna	Phase 2 Logframe	Jan-15
SDC	Phase 2 End of phase report	n/a
Scaling-up Productive Water (IDE)		
IDE	Scaling up productive water, Phase 2. Technical proposal to SDC submitted by IDE	Nov-13
SDC	Credit proposal Phase 2 (2014-2016)	n/a
IDE	Scaling up productive Water Phase 2. Final Operational Report (Feb 2014 – Oct 2017)	n/a
Essence Direct	Evaluation of SDCs Scaling up productive water project	Jul-17
SDC	End of the project Report (Feb 2014 – Dec 2017)	Sep-18
IDE	Scaling up productive water. Logframe Targets	Nov-20
iDE	Scaling up productive Water. Post-project evaluation guidance	Mar-21
IDE	Transforming Smallholder Irrigation. A report on the results and lessons learned from the Scaling up Productive Water Project	n/a
Young Water Fellowship (YWS)		
YWS	ProDoc Amended Final	Jan-20
YWS	YWF Logframe	Jan-20
YWS	YWF19 ANNUAL PROGRESS REPORT	Jun-20
YWS	2019 YWF Global training full report_final	2019
YWS	YWF 2019 Fellows presentation.	2019
YWS	YWF EA Training report_final	2020
YWS	YWFEA 2019 fellows presentation	2020
YWS	Alumni presentation	2019
YWS	Call for applications 2019 PPT report	2019
YWS	YWF Manual_2020	2020
YWS	YWF18-20 no cost extension request_v2	Jan-21
YWS	YWS_Impact measurement strategy	N/A

YWS	BoP indicators WASH	N/A
YWS	Gender indicators	N/A
YWS	Gender session	N/A
YWS	Inclusive Business Model	N/A
YWS	All fellows info (database)	Feb-21
YWS	Application to participate in YWS-cewas Acceleration programme (Responses)	Feb-21
Swiss Bluetec Bridge (Strategos) – phase I		
SBB	Phase I credit proposal	2011
SBB	Phase I Logframe	2011
SBB	Phase I additional credit proposal	2014
SBB	Phase I Final report Strategos Novembre 2012 - Décembre 2015	May-16
SBB	Phase I End of Phase Report	Mar-16
Swiss Bluetec Bridge (Strategos) – phase II		
SBB	Phase II credit proposal	2015
SBB	Phase II Logframe	2015
SBB	SBB Phase II End of Phase Report	Jun-20
SBB and cewas	SBB Phase II Final report Strategos Cewas	Apr-20
SBB and cewas	SBB Phase II Final report Strategos Cewas Exec summary conclusions	Apr-20
Financecontact	SBB Phase II Managing the legacy review conclusions proposal final	2020
RRR (GIZ and EAWAG)		
GIZ	RRR Credit Proposal	2015
GIZ	RRR additional Credit Proposal	2017
Eawag	RRR TOR ProDoc Lima	2016
GIZ/Eawag	RRR Logframe	2016
Eawag	RRR Eawag Lima Final Progress Report	Sep-18
GIZ	RRR Kampala GIZ final operational report part 1	2020
GIZ	RRR Kampala GIZ final operational report part 2	May-20
Ecopsis	RRR External Review report	Dec-20
Additional literature		
Beutler and J. Hermann-Friede	Creating Impact with Water Entrepreneurship. cewas Middle East programme	2019
Dalberg	The Untapped Potential of Decentralised Safe Drinking Water Enterprises	Jul-2017
Global Impact Investing Network (GIIN)	2020 Annual Impact Investor Survey	2021
Q. Grafton et al.	The paradox of irrigation efficiency, Science Vol. 361 Issue 6404	2018
IIED et al.	Supporting water ser vice providers during conflicts	2017
F.C. Stam & Ben Spigel,	Entrepreneurial Ecosystems, Working Papers 16-13, Utrecht School of Economics.	2016
Stam, E., van de Ven, A.	Entrepreneurial ecosystem elements. Small Bus Econ 56	2021
SDC Global Programme Water	Strategic Framework 2017 – 2020	2017
SDC Global Programme Water	Programme Framework 2021- 2024	Jan-21

7.3 Review questions at project-level [37]

<u>Review questions at Project Level (cewas and YWF)</u>

Relevance

1. *Is the project design still relevant in the current context (water crisis, emergency needs related to Covid-19, political context, managerial, operational and financial sustainability)?*
2. *Are the project approach (design, method, location, and duration), the project management and organization as well as the quantity, quality and technology of the material and services provided through the implementing partners appropriate to meet the objectives?*
3. *Are the project inputs (original and new) defined appropriately to attain the expected output and outcomes?*
4. *Are the established partnerships relevant to attain the proposed objectives?*
5. *Is the project objective consistent with national sector strategies and policies in the intervention countries?*
6. *Is the project supporting GPWs basic values such as gender equity and mainstreaming (is the project including gender sensitive water indicators, disaggregated data, etc.)?*

Effectiveness (doing the right things)

7. *To what extent have the outputs been achieved and to what extent have they contributed to the achievement of the expected outcomes?*
8. *Is the transfer of know-how to the entrepreneurs sufficient and adequate in the project?*
9. *Have needs and expectations of the intended direct beneficiaries (i.e. the entrepreneurs) been adequately addressed in project design and implementation?*
10. *What is the level of satisfaction by the end beneficiaries of the project? (-> the customers of services/products sold by SWEs)*
11. *How is the relation between outreach and depth of impact at the level of the SDC target groups and resources deployed (cost-benefit-analysis or cost-effectiveness relations)?*
12. *To what extent has capacity building in the project enhanced own initiative, self-confidence, self-reliance and accountability of the direct beneficiaries?*
13. *Have strategies been developed and implemented to replicate the achievements of the project?*
14. *Has the project supported the development of new policy or legal frameworks?*

Efficiency

15. *Are the project funds used efficiently ?*
16. *What measures have been taken during planning and implementation to ensure that resources are used efficiently – especially in a difficult context where delays, strategy modification, restrictions related to Covid-19 and other emergencies hamper the normal implementation of the project?*
17. *Have there been any efforts to seek synergies with other donor-funded programmes and projects?*

[37] As per the TORs of this review. The questions on portfolio level were grouped and slightly rearranged to avoid overlap / duplication.

Sustainability

18. *What is the current level of institutional consolidation and financial sustainability of the implementing organization of the project?*
19. *To what extent have the entrepreneurs been formalized in their activities and business lines? How sustainable is their situation (investment-readiness, investments received)?*
20. *How are the entrepreneurs embedded in national, regional or global structures that can support their sustainability and effectiveness? Have project activities supported such institutional embedding and consolidation?*
21. *What is the potential for scaling up of the project? How?*

Impact

22. *In what way is the project contributing to improved access to water and sanitation, with a focus on disadvantages communities? Has there been an improved supply of water and sanitation services?*
23. *Has the project contributed to better management of water resources?*
24. *To what extent have the local and / or national authorities been involved in the development of the business models? To what extent have the projects enabled the political environment towards adopting water and sanitation entrepreneurship within the national agendas of the targeted countries? What is the potential for uptake and wider dissemination in terms of institutional framework and public sector engagement?*
25. *To what extent has the project promoted / adopted a human rights-based approach?*
26. *What is the level of ownership and impact of these activities by the concerned authorities – at local, city, national levels?*

Partnerships' and Stakeholders' performances

27. *Has a proper assessment of the stakeholders' roles, capacities and resources been conducted in the design phase of the project? Have the involved stakeholders assumed and fulfilled their respective roles and obligations fully in line with the different project agreements? Have government institutions played a constructive and supportive role for project implementation?*
28. *If work has been sub-contracted by the contract partners of the project, have the respective roles of the contractor and the sub-contractor been adequately defined? How did contractor and sub-contractor share responsibilities and contribute to the overall outputs and outcomes of the project?*

7.4 Review questions at portfolio level

Relevance, efficiency and effectiveness of past/ongoing interventions (with a mainly retrospective focus i.e. what has happened up to now)

1. *Were the intended objectives relevant in view of the intended systemic change toward a water-secure world and improving job opportunities?*
2. *Are the projects on track to achieve (or have they achieved) their intended objectives and results (the logframe for each of the projects defines baseline and objectives)?*
3. *What are the levels of development efficiency, effectiveness and the sustainability achieved? (Special attention is required to assess the impact on end beneficiaries and sustainability of the projects.)*
4. *All individual projects supported the development of specific water and sanitation business models associated to different contexts (rural, peri-urban, urban). Are these models technically, environmentally, financially and economically/socially sound?*

Lessons learnt of the business models and format (i.e. conclusions from achievements so far, incl. ecosystem aspects)

5. *What are / have been the main challenges and successes for implementation and wider uptake of SWE approaches, from both the public and the private sector points of view?*
6. *The programme experimented with different financial market-oriented formats: what are the lessons learned from this experience? Are there formats working better than others? How best to use and adapt the formats in a specific situation and context?*

Potential for further uptake, mainly in financial sector (i.e. more broader considerations about investor appetite in impact investment (mainly water/sanitation entrepreneurs)

7. *What is the level of engagement of the financial sector for social entrepreneurship development in general and in particular for the water and sanitation sectors?*
8. *What is the potential for large-scale dissemination and uptake via private investors and entrepreneurs?*

Future GPW strategy: pertinence, strategic axes, Swiss added value (i.e. related to ongoing as well as potentially additional initiatives, within SF21-24, as well as justification of impact/Theory of Change)

9. *What could be the future strategic direction and ambitions of SDC GPW's engagement with SWE (long-term vision, impact)?*
10. *What is the pertinence and articulation of a possible continuation of SDC GPW's engagement with SWE through future contribution phases (e.g. CEWAS Middle East, YWS, new emerging initiatives)?*
11. *To what extent is SDC GPW's engagement with SWE justified from a social, technical, economic, environmental, political, and financial point of view, and what are potential risks and uncertainties in view of potential future phases? (A particular emphasis should be placed on the interlinkages between SWE and public water production and distribution systems at municipal / local level (and alignment with the relevant public policies and strategies)).*
12. *What is the added value for SDC /Switzerland to continue the engagement with SWE?*
13. *What are further opportunities for (impact-driven) private sector engagement and the development of circular economy approaches in the water and sanitation sectors? What are other actors in this domain doing (donors, UN, foundations etc.)?*

7.5 SDGs

7.6 Example of an acceleration program curriculum

BUSINESS STRATEGY	PRODUCT DEVELOPMENT R&D	PEOPLE PRACTICES	MARKETING & SALES	FINANCIAL MANAGEMENT	FUNDRAISING	EXECUTION	IMPACT	GOVERNANCE
Defining purpose, vision, and mission	Designing a customer centric product/service	Core values and guiding principles	Building a growth hacking strategy, execute & measure experiments	Developing financial modeling and computational thinking	Defining valuation and investment terms	Designing systems and process controls	Designing impact metrics and management	Governance practices
Building solutions that customers love and want to buy	Defining the product roadmap and executing efficient product development processes	Leadership	Understanding paid marketing	Unit economic analysis	How financial institutions work and what is the right fit now	Designing objectives per teams/ areas, performance measurement		
Building and testing hypothesis about solutions	Designing a research and development strategy	Planning your team	Understanding unpaid marketing	Building a P&L	Preparing to have conversations with investors	Making decisions and managing operations effectively		
Making strategic decisions		Building your team	Assessing & strengthening sale & distribution funnel	Constructing and analyzing cashflow	Building a fundraising strategy and materials	Designing best practices to operations		
		Team experience	Customer relationship management					

Source: SAGANA, curriculum for a learning solution to support early-stages entrepreneurs (31 modules across 9 capacity building areas)

7.7 Type of actors involved in SWE financing

- **Donor agencies** – SDC has been one of the agencies at the fore-front of supporting social water entrepreneurs through the portfolio reviewed in this document. Other actives donors are notably the GIZ, the SIDA and USAID:
  - Similarly to SDC, GIZ is active in the WASH sector through a range of projects and addressing a variety of issues (governance, policy, etc.). In some projects, the agency also facilitates access to risk capital for start-ups and social enterprises that offer innovative solutions for poorer sections of the society
  - SIDA runs challenge funds to finance entrepreneurs who usually lack capital to start or scale their businesses. The agency runs several thematic challenge funds, including on water. In parallel, the agency provides international training programmes; (for instance, "Sustainable Urban Water and Sanitation – Integrated Processes in 2019)
  - USAID also works through a range of instruments to plan, finance and deliver safe water and sanitation for all in a number of partner countries. The key focus is to strengthen governance and access to finance. While the agency works a lot with municipalities and utilities, they also support selected social entrepreneurs with technical assistance or funding

  While many initiatives from donor agencies offer technical assistance to social entrepreneurs, sometimes they finance with different instruments, as well as offer networking and support to strengthen governance and ties to authorities. Funds structures are less common in the WASH sector. Existing initiatives will have a Water-Energy/Food/Health nexus, where the focus on water is serving another SDG.

  For instance, some key initiatives are the recently launched **WE4F (Water Energy for Fund) challenge fund**[38], applying a Water-Energy-Food nexus to address interrelated risks in the water, energy and food sectors. It seeks to promote the development and dissemination of innovative and economic approaches for using climate-friendly, energy-efficient, and water-efficient technologies and innovations. The challenge fund is organized in four regional hubs, with cewas being a member of the MENA hub. This also reinforces a transition from "blue entrepreneurship" to "green entrepreneurship", with the main assumptions that the water sector can attract more commercial funding if blended with other objectives. In 2013 already, the same actors had launched the Security Water for Food Grand Challenge.

  This trend is also observed in other initiatives – for instance the Islamic Development Bank has launched the **One WASH Fund** to combat cholera and other diarrheal diseases in 2019. The IDB, PepsiCo and the PepsiCo foundation extended in 2021 the terms of their PPP to support projects at the intersection of various areas: water access; sustainable agriculture, inclusive recycling and economic recovery.

- **Wealthy individuals or family offices:** These set part of their wealth aside to support innovative and impactful projects. Although these investors also look for some financial returns, they offer more patient capital and are ready to settle for less returns in exchange for more impact. These investors alone can therefore support some selected, early-stage social enterprises but cannot de-risk investments to the point that commercial investors would invest in those businesses. Normally these FOs see these investments rather as a replacement of their philanthropic activities, which are rather a small part of their overall wealth.
- **Foundations**[39]. Similar to wealthy individuals or family offices, recently more foundations explore to support selected projects often as their first step into impact first impact investing. They also offer some initial capital for early-stage companies. Foundations can also offer technical assistance either internally or through external experts and offer their networks to their fellows. The amount of funding might be greater than that

[38] A joint international initiative of the German Federal Ministry for Economic Cooperation and Development (BMZ), the Ministry of Foreign Affairs of the Kingdom of the Netherlands, the Swedish International Development Cooperation Agency (Sida) and the US Agency for International Development (USAID)

[39] Bill and Melinda Gates Foundation, Stone Family Foundation, Conrad N. Hilton Foundation, Vitol Foundation, among others

of wealthy individuals or family offices. Foundations can also help shed light on some initiatives and help to bring new clients and potentially investors

- Specialized WASH sector funds –There are very few of those funds. The ticket size would range from hundreds of thousands of US dollars to a few million. Their strategy might vary:
    - Aqua for All supports social enterprises in emerging markets to grow and scale. The ticket size is hundreds of thousands of US dollars. Main investors are donor organizations and DFIs.
    - WaterEquity invests into microfinances institutions to provide financing capacities (loans) to low-income customers. This focus allows to offer double digits returns to investors They also invest to a smaller extent in local utilities to help them develop the infrastructure and connect more individuals to it. The different funds mostly invest in South-Asia and South-East Asia. They have very few investments in social enterprises. Main investors will be donor organizations and some institutional investors.
    - Danone Communities invests in social enterprises focused on water and nutrition. Their target are emerging consumers and not the Bottom of the Pyramid. The initiative is funded through individuals, institutional investors and the company Danone.

cewas

To:
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25 August 2021

Management Response to External Evaluation from EBP-Sagana of cewas Middle East and the SDC-GWP Social Water Entrepreneurship Portfolio

Summary

This management response relates to the External Review of SDC's Social Water Entrepreneurship Portfolio of project that was mandated by the SDC to a consortium consisting of EBP and Sagana and was executed in spring 2021. The cewas Middle East Programme is one of the 6 projects of this portfolio that was evaluated. In this Management Response, cewas will only comment on statements and results related to the cewas Middle East Programme and its relation to the SDC Social Water Entrepreneurship Portfolio.

The cewas management acknowledges the efforts and professionalism the evaluators have put into their very extensive work. We believe the evaluators have done their job with due care and managed to identify the most important strengths, weaknesses, threats, and opportunities related to the cewas Middle East programme.

We carefully read the evaluation and we can conclude that **all the statements** about the cewas Middle East Programme (numbers, results, etc.) **are factually correct**. While we do not agree with every single detail of the review findings (especially on how much weight has been put on some topics), we believe the findings of the evaluators give a good overview of the cewas Middle East Programme as of the end of 2020. We also think that **all the recommendations for the cewas Middle East Programme** make perfect sense, especially a stronger focus on acceleration, stronger engagement in national policy dialogue and a more elaborated impact measurement system. The cewas management will be happy to take the recommendations into account when developing a potential 3rd phase of the cewas Middle East Programme for 2022-24.

On the portfolio level, we are happy to see that **cewas Middle East was rated as the project with the best cost-benefit ratio.**

We do think that the evaluators have **a slight inclination and bias towards later stage, investment-ready social enterprises** and do not put as much weight to holistic, bottom-up building of the entrepreneurial pipeline as we do. Putting a "focus on acceleration" only makes sense if there are enough Social Water Enterprises in a country that are ready to be accelerated. In many less developed countries this is unfortunately not the case and actions need to happen much earlier in the entrepreneurial pipeline.

We also believe that SDC would not fill a strategic gap if it would become an anchor investor in a fund focussed on WASH. There are other, financially more potent public and private actors that can take up this role. We suggest that **the SDC** rather **has a catalyst role to enable the facilitation**, **coordination, and matchmaking of potential investors around Social Water Enterprises**. Like this, the SDC as a "small" donor could create substantial impact by leveraging much larger investments of other actors.

Comments to the conclusions and recommendations to cewas Middle East

Following, you will find more detailed comments from the cewas management to the external evaluation. Our comments will focus on the main conclusions (SWOT analysis in Chapter 3.5) and the subsequent key recommendations for the SDC with regards to the cewas Middle East Programme:

S

- Comprehensive incubation programme with tailor-made coaching, very satisfied SWE
- Strong networking skills (engagement with direct ecosystem, demand creation)
- Strong need-based initiation but also demand-based market test of business models (no grants, but support for fund raising)
- Technical assistance for national incubation partners in phase II

W

- No tangible results at policy or legal framework level, limited linkage to national government institutions and to Blue Peace Initiative
- Relevance of SWE to innovate the formal, public water sector is unclear e.g. no link to the large water utilities in Jordan, no structured approach to advocate on changing public procurement processes in favor of water entrepreneurs
- Entrepreneurs from vulnerable communities exist but are not a focus
- Lack of solid impact measurement methodology and impact-related data collected from SWE, risking that the models developed don't get enough attraction by impact investors

O

- Systemic approach of cewas to SE development, including experiences and involvement in other projects / geographies
- From *blue* to *green* social entrepreneurs, health sector may be considered more strongly
- Involve end-beneficiaries more intensely in monitoring and results measurement (also: collaborate with university students to conduct case studies)
- cewas strategy 2022+ (focus on ideation, acceleration, and technical assistance for national incubation partners) shows agility and SWE need-oriented thinking
- Exploring more systematically business cases with a link to digital technologies and the platform economy

T

- Whether SWE are a key ingredient to reaching SDG 6 in the country of interventions is an assumption rather than a conclusion from a needs analysis → the rationale for the governments to integrate SWE into their sector strategies needs to become much stronger to ensure a lasting effect in the region
- No suitable partner to address weakness in policy dialogue and linkage to formal water sector institutions (national, regional)
- Limited scalability of achievements through current incubation / ecosystem partners
- Achievements may erode when cewas moves into a new field of activity

SWOT analysis and main conclusions by the external evaluators on the cewas Middle East Programme

Strengths

The cewas management is very happy to hear from an independent evaluator that "...the programme is seen as of high quality..." and that "cewas is described as outstanding" (page 14). This re-assures our strategic focus of offering the highest quality support to entrepreneurs and ecosystem actors. For our work in the future, we will strive to continue "walking the extra mile" to provide excellent support and services to make an even better case for WASH entrepreneurship.

Weaknesses

No tangible results at policy or legal framework level

Yes, this statement is factually correct. Although cewas was interacting with policy level actors, **it was not the intention to achieve tangible results at policy or legal framework level in the first two phases of the programme**. As the evaluators correctly state on page 22 and 23 of their evaluation, cewas developed an Ecosystem Study at the end of phase I, recognizing the need for a more systemic approach forward. For this study, the entrepreneurial ecosystem model according to Stam and Spiegel (2016) was used, which identifies systemic conditions (networks, leadership, finance, talent, knowledge, support services) and framework conditions (formal institutions, culture, infrastructure, demand). At the beginning of Phase II, cewas took a strategic decision with the SDC in the programme steering committee to concentrate efforts for this phase mainly on the systemic framework conditions a) finance, b) talent and c) support services (i.e. national incubators) as the evaluators correctly state. Nevertheless, the cewas management agrees with the evaluators that in a potential third phase of the programme, a focus should be made on achieving tangible results at the policy/legal framework level, complementing the achievements that have been made in the ecosystem level to date.

Relevance of SWE to innovate the formal, public water sector is unclear (e.g. link to large water utilities)

While this point was a focus of the programme in Northern Iraq, this was indeed not the case in Jordan, Lebanon, or Palestine. The cewas management sees a **lot of potential** in the next programme phase **to systematically link entrepreneurs with public and private sector companies and utilities**. The on-going regional acceleration programme is already taking initial steps in this direction by involving industry partners and establishing links between enterprises and key sector stakeholders.

Entrepreneurs from vulnerable communities exist but are not a focus

It was never the intention, and the programme is indeed not designed as an employment/self-employment scheme for people from vulnerable communities or as a programme to formalise small, informal businesses. A completely different approach would be needed for that. The cewas Middle East programme focusses on relatively few, often well-educated entrepreneurs that are developing businesses that have the potential to benefit vulnerable communities on a large scale. **Serving vulnerable communities are a core focus of the programme, but as clients/beneficiaries of the supported entrepreneurs**, less as entrepreneurs themselves. Another principle that is conveyed throughout the cewas Middle East programme is that of inclusive business, where members from vulnerable communities are involved in the entrepreneurial value creation process. Beyond this, the cewas management highly encourages entrepreneurs from vulnerable communities to participate in the programme if they can profit from it.

Lack of solid impact measurement methodology and impact-related data collected from SWE

Yes, the cewas management is fully aware about this weakness and is working on this issue with full force.

Opportunities

The management takes notice of the presented opportunities. Some of them are already on our radar (e.g. health – one topic in the current regional acceleration programme 2021), others like the platform economy we will be happy to explore further.

Threats

Governments are unwilling to integrate blue / green entrepreneurs into their sector strategies and thus hamper SWE to become a recognized factor

We have ambivalent opinions on this point. In some cases (e.g. in the current crisis in Lebanon) we do not see how a resource-intensive interaction on the national policy level trying to adapt national sector strategies would generate tangible results in the sense that it would improve the working conditions of SWEs in Lebanon in any way. Jordan on the other hand is a completely different case: Here we agree with the evaluators that **it is now the right time to start a policy dialogue with the Government in Jordan** and that this work could improve the framework conditions of the entrepreneurial ecosystem and subsequently create more SDG relevant impact (created by SWEs) in the long run. cewas has started an engagement process with governmental partners (MODEE, MoE, etc.) in the beginning of 2021 and is now building with partners of the Green Entrepreneurship Network and long term and focused dialogue, lobbying and advocacy with key public stakeholders.

Finding a suitable partner to address weakness in policy dialogue and linkage to formal water sector institutions (national, regional) may be difficult

The cewas management disagrees with this point. Thanks to our on-going work and the continuous support of the SDC in the last 5 years, **cewas has a strong and reliable partner network** that could support and complement cewas' potential activities on a policy level. We also do not have the impression that out ties with the Government institutions e.g. in Jordan are weak – we so far just did not have a defined mandate for more intense interactions.

However, for a potential third phase of the programme we envisage a twofold approach: a) cewas will intensify supporting its trusted partners to achieve tangible results at policy and/or legal framework level; b) cewas is currently in the process to establish a subsidiary organisation ("cewas Jordan") registered as a local organisation in Jordan. The status of being a local Jordanian organisation will allow cewas to interact more directly with the Jordanian policy actors to achieve tangible results in this field.

Achievements related to creating an entrepreneurial ecosystem for WASH (and green) social entrepreneurs may erode when cewas moves into a new field of activity. The level of capacities at the incubation partners in Jordan and Palestine with regards to blue/green entrepreneurship promotion is not yet at a self-sustaining level.

Yes, we fully agree. Capacities of incubation partners have been increased and blue/green entrepreneurship became part of their overall strategic orientation, but they are not yet at a self-sustaining level. However, we are confident that this "**self-sustaining level" can be achieved if the SDC would support such activities in a potential third phase** of the cewas Middle East programme until 2024.

If SDC discontinues co-financing, cewas will either search for alternative funding (outcome unknown) or scale down its incubation programme (probably cutting mainly on the policy dialogue which is not cewas' core business)

Yes, this might be the case. Irrespective of the decision of the SDC to potentially fund a third phase of the cewas Middle East programme, cewas will continue supporting SWEs in the Middle East as a strategic priority. However, it is indeed unlikely that the cewas management will find an alternative donor in the next 6 months that has the same commitment and interest as the SDC to co-finance 50% of a long-term, systematic programme that supports Social Water Enterprises in the Middle East. We came to the realisation that some elements of the cewas Middle East Programme are "relatively easy" to co-finance, e.g. immediate output related activities and support such as ideation events or direct investments to enterprises. More long-term impact related elements, like **facilitation between investors and entrepreneurs, ecosystem development or policy dialogue are crucial from a systemic point of view**, but very hard to co-finance. We would be therefore very happy if the SDC would continue supporting our work that entails a lot of systemically important, but hard to co-finance elements.

Recommendations on project level

In general, **the cewas management agrees with all suggested recommendations** by the evaluators as presented below. The management and the operational team have already started to operationalise and implement a number of them in the current running programme phase until the End of 2021. We are planning to tackle the remaining ones in a potential third phase of the programme:

- Better analyze and elaborate the **rationale** about why SWE are a key ingredient to reach SDG 6 in the countries of intervention; engage with governments to integrate SWE into their sector strategies
- Find suitable partner(s) to address its weaknesses in national **policy dialogue** and to strengthen its engagement i) through formal water sector institutions and ii) with water utilities (innovation)
- **cewas' strategy 2022+** is well justified and should be supported; ensure that selected ecosystems continue to develop and that engagement with government is improved; encourage acceleration programme
- SDC must focus on the potential for **scaling the impacts** at the level of customers / end-beneficiaries as well as closely monitor how customer segments evolve (issue of inclusiveness)
- Continue **capacity building support for incubation partners** (INJAZ, PPU Hebron), with focus on their business planning
- Clarify replication potential of incubation programme in **North Iraq**
- Collect **data related to SWE performance and related to end-beneficiary impacts** more strategically and thoroughly

Main recommendations of the external evaluators for the cewas Middle East Programme

Better analyse and elaborate the rationale about why SWE are a key ingredient to reach SDG 6 in the countries of intervention; engage with governments to integrate SWE into their sector strategies

Yes, we fully agree that this should be the starting point to frame a policy level intervention in a potential third phase of the programme for 2022-2024.

Find suitable partner(s) to address its weaknesses in national policy dialogue and to strengthen its engagement i) through formal water sector institutions and ii) with water utilities (innovation)

While we do believe that we already have a solid partner network that we can build on, we agree that we should strengthen the programme's **engagement in national policy dialogue** and formal water sector institutions. We would suggest prioritizing **this for Jordan** as a first test case and then continue in different geographies in a potential next phase of the programme. We will be happy to involve and get the support of the SDC Office in Amman and/or the Blue Peace Initiative as suggested by the evaluators. We would further suggest intensifying our engagement with water utilities (and linking them with our entrepreneurs) in all countries of operation.

cewas' strategy 2022+ is well justified and should be supported; ensure that selected ecosystems continue to develop and that engagement with government is improved; encourage acceleration programme

We fully agree. Please note that **we are already testing several elements of the cewas 2022+ strategy** in this last programme year of Phase II (2021) such as the acceleration programmes, further supporting incubation partners or engaging with public partners.

SDC must focus on the potential for scaling the impacts at the level of customers / end-beneficiaries as well as closely monitor how customer segments evolve (issue of inclusiveness)

We fully agree on this point, and we are happy to support the SDC with this. After six years of developing the pipeline of Social Water Enterprises, we do believe it is strategically the **right time to focus on acceleration** and focus our work on fewer, but more impactful SWEs with a high scaling potential.

Continue capacity building support for incubation partners (INJAZ, PPU Hebron), with focus on their business planning

We fully agree and we will be happy to do so in a potential third phase of the programme.

Clarify replication potential of incubation programme in North Iraq

Iraq has been a challenging ground for Social Water Entrepreneurship for the obvious economic and geopolitical reasons and visible progress of cewas' activities has been slow until mid-2020. However, this has changed completely in the last months and there are a lot of very promising developments (new enterprises, new partners, new investors, new programmes) that will catapult the so far rather dormant entrepreneurial environment to a completely new level! We would propose to further **intensify activities in Iraq** in a potential next programme phase and especially include **all regions of Iraq** (not just Northern Iraq).

Collect data related to SWE performance and related to end-beneficiary impacts more strategically and thoroughly

Yes, we fully agree. We have already intensified our impact-related data collection methodology and activities even before the external evaluation has been commenced. We are currently in the middle of our three-annual impact study data collection and expect robust results in Fall 2021. Furthermore, we are also developing a more continuous impact monitoring system with our more advanced entrepreneurs that we seek to implement from 2022 onwards.

Comments to the conclusions and recommendations at portfolio level

In the following comments on all conclusions at portfolio level, the cewas management will only comment on issues related to the cewas Middle East programme on additional points that have not yet been mentioned on the cewas Middle East project level. We leave it to the managements of the respective lead organisations of the other 5 projects and the SDC to formulate further comments to the evaluation on the portfolio level. We would like to highlight 3 further points:

Review Findings on Portfolio Level

Cost Effectiveness of the six projects

The cewas management has read the review findings of all the 6 portfolio projects with great interest. We **are pleased to see that the evaluators consider the cost effectiveness of the**

cewas Middle East programme as high (see Page 44). We assume that one out of several reasons for this is the fact that cewas usually does not invest SDC funds directly into enterprises (direct investments are sourced from sources like external investors, other donors, etc). On a strategic level, this result fortifies our opinion that the SDC can create most impact if it invests its limited financial resources for SWEs for **activities that help entrepreneurs to become investment ready** (trainings, coaching, technical assistance, ecosystem development) and activities that lead to successful matches between investors and entrepreneurs (ecosystem development, matchmaking facilitation, coordination, tools development).

Strategic recommendations at portfolio level

Focussing on acceleration and build a network of investors

We think that the evaluators do not put the same importance to a thorough, bottom-up pipeline development of social enterprises as we do at cewas. We believe that if impact shall be created by a number of SWE at acceleration or scaling stage, many many more need to try, struggle and fail at ideation and incubation stage to pave the ground for those successful ones that eventually create impact. We think that this general principle of the "social enterprise funnel" cannot be ignored. If there are no or just a very few enterprises in a country at ideation or incubation stage, it is not possible to start straight away with acceleration. If there is no pipeline of social water entrepreneurs and no supporting ecosystem in a specific country or region, it must be built first! This is a lengthy, risky, and time-consuming process and was the main focus of the cewas Middle East Programme in the last 5 ½ years. We are very grateful that the SDC had the **patience to support this process of pipeline building and ecosystem development** support for SWE in Lebanon, Jordan, Palestine and now also Iraq.

For the above-mentioned reasons, we disagree with the general suggestion of the evaluators to "focus on acceleration" only. The SDC should support SWEs at that stage where assessments show that there are clear gaps in a region – whether they are in ideation, incubation, or acceleration stage.

Nevertheless, **for the cewas Middle East Programme** at this point of time and in our countries of focus, the main recommendation of the evaluators to **"focus on acceleration" does make perfect sense**. The same applies to the second strategic recommendation of the evaluators to **"build a network of investors** and/or reserve capital for follow-on investments to help accelerated companies to grow" is inherently coupled with acceleration. Again, this makes perfect sense for a potential next phase for the cewas Middle East Programme. We have already started with these activities in 2020 and promising results can be expected in the coming months. We would very much look forward to intensifying these activities in an upcoming 3rd phase of the cewas Middle East Programme in the Middle East together with the SDC.

SDC-GWP should become an anchor investor in a fund focused on WASH

We are not convinced by the recommendation of the evaluators to *"provide this budget as an anchor investor in a fund focused on WASH in a selected region"* is the right way to go for SDC-GPW. Based on our experience and work with USAID, GIZ, the Dutch Government and other larger DFIs, such an anchor investment in a region would need to be at least 10 to 20 Mio. CHF; ideally much more. While the cewas management is not in the picture of whether these larger amounts (10 Mio+) are at disposition for SDC-GWP, we assume that if these funds are available, it would come with the price of having to compromise on other engagements in the fields of SWEs.

Hence, we would suggest to SDC to **primarily invest into becoming SEWs investment ready and the process of building and facilitating networks of investors** and not necessarily invest primarily in a fund or SWEs itself. For the Middle East for example, the cewas management is confident that sufficient investors can be attracted to invest into scalable SWEs. We do not see a funding gap at the level of investment funds, as our engagement with the Water and Energy for Food Programme for MENA (11 Mio. US$ lead by USAID) shows. However, there is a clear **funding gap to attract, manage, facilitate, and coordinate potential investors around SWEs at acceleration stage** in the Middle East. Here we believe an engagement of the SDC with a moderate amount could create substantial impact that could be multiplied by much larger investments of other actors.

The cewas management will be happy to discuss clarifications, questions, or any other further points with the SDC-GPW. We would like to thank the SDC-GPW and the evaluators for their engagement and commitment in this very interesting learning exercise.

Thank you very much and with kind regards from Amman and Willisau!

Aline Bussmann	Michael Kropac
Co-Director cewas	Co-Director cewas

Brussels, July 12th 2021

External Evaluation of the Social Water Entrepreneurship Portfolio of Projects

Young Water Solutions' Management Response

1. Introduction

The present management response intends to provide Young Water Solutions' (YWS) perspective on the findings described in the External Evaluation of the Social Water Entrepreneurship Portfolio of Projects by Sagana and EBP, mandated by the Global Programme Water (GPW) of the Swiss Agency for Development and Cooperation (SDC).

We thank the authors for such a comprehensive audit performed, and take note of the findings and recommendations, which are of utter importance in the planning of the next phases and improvement of the Young Water Fellowship (YWF) programme.

However, YWS management believes that important aspects of the programme, including its focus, scope and implementation status have been overlooked, while they are crucial to some of the claims in the audit report. This document provides, therefore, detailed comments and reflections from YWS' management on statements in the audit report (quoted in italics) that concern the YWF and need clarification, both at project and portfolio level. These are mainly related to:

1) The fact that the core focus of the YWF, as established in the programme design and in contractual arrangements with donors and partners, is youth empowerment in relation to the Sustainable Development Goal Nr. 6 (SDG 6) through social entrepreneurship; not start-up incubation to scale, although that is the main evaluation criteria used by the auditors;
2) The impossibility to evaluate start-ups that are still in validation phase or have been operating for less than one year for their investment-readiness and financial stability (the case of 80% of start-ups at the time of the audit);
3) The fact that although the programme is still under implementation, the evaluation of outputs and outcomes are written as achieved/not achieved in the report, even if important components have been left out of the audit analysis (mainly related to ecosystem building, acceleration and impact measurement that were too early to evaluate).

2. Factual errors

YWS management has shared in written the factual errors identified in the first version of the audit report, which we received after its completion. While most of these factual errors have indeed been corrected, the following ones remain:

"We also find that the countries were the editions were held are not priority countries in the GPW's programming framework for 2021-2024 (Kenya, Uganda, Ivory Coast or Senegal)" (p.37)

It is important to note that there were no YWF editions in Kenya or Uganda. The scope of implemented editions was either global, East Africa, Ivory Coast and Senegal. There are Kenyan and Ugandan Fellows selected in the global and East African editions, and the training of the YWF East Africa was organized in Uganda, but those countries do not represent the scope of any YWF edition so far.

It reads in Annex 7.1.2, Young Water Fellowship programme, Key information of the project; country/region*: ''Global; regional editions in East Africa (Tanzania, Uganda); West Africa (Senegal, Ivory Coast).''*

There was not a special focus in Uganda and Tanzania, and the editions in Senegal and Ivory Coast were not regional but national. The correct statement would be ''Two editions at Global scale (all low and middle income countries eligible); one regional edition in East Africa (13 countries eligible); two national editions in Senegal and Ivory Coast.

3. Response to findings at project level

"The focus on youth is difficult to reconciliate with the objective of creating sustainable business delivering large-scale impact" (p.26); "Established entrepreneurs in the WASH sector are better suited to scale their solutions and reach a greater number of people" (p.32)

The primary focus of the YWF is not business scalability and profitability, but youth empowerment in relation to SDG 6 through social entrepreneurship.

While every programme that includes social entrepreneurship and incubation activities strives to create profitable, scalable social businesses out of it, **the YWF is, at its core, a youth programme, focused on empowering young people to contribute to SDG 6 through social entrepreneurship, and cannot be assessed with the same criteria as other incubation programmes that do not have a youth focus**. Its main goal is to empower local youth in providing solutions to water and sanitation issues, let them channel their creativity and commitment through entrepreneurial ideas that contribute to improving the living conditions of vulnerable people, and give them the same opportunities that older, more experienced entrepreneurs have by providing guidance and resources to validate *and initiate* their businesses. This becomes clear when looking at the logframe outcomes, listed below:

*Overall goal: **Young people are largely recognized and empowered** as agents of change in the water sector contributing to sustainable water resources management and universal access to safe and affordable water and sanitation services in vulnerable communities.*

*Outcome 1: **Young people are attracted to the water sector and acquire the necessary tools and skills to set up social enterprises** that tackle water-related challenges integrating women, other young people, the poor and disadvantaged.*

*Outcome 2: **Social enterprises led by young entrepreneurs that effectively offer sustainable solutions** to increase access to safe water and sanitation services as well as sustainable water resources management **are initiated**.*

*Outcome 3**: Lessons learned** and concrete results obtained from innovative initiatives led **by young people are used to create a long-term strategy to scale-up the YWF programme, as well as to nourish knowledge exchange and the policy dialogue** at various levels, **leading to a lasting involvement of young people in efforts to provide solutions to water related challenges**.*

Although the youth focus is mentioned throughout the audit report, the assessments about relevance, effectiveness and impact seem to ignore this in most cases and assess the programme according to what extent it has created profitable, scalable businesses.

The YWF theory of change is that young people are able to offer valuable contributions to WASH issues that can have market potential, but they do not have access to the same resources older entrepreneurs have. Since the first edition, 75 entrepreneurs have been supported in their goal of initiating a social business to contribute to a WASH issue, and many have proven the impact that the programme can have: from Yvette Ishimwe from Rwanda (IRIBA – 2017 edition, not SDC funded) who had her first water kiosk at 20 years old funded by YWS and now serves 30,000 people daily (having received equity and being quoted by Bill Gates), to Anna Beserra from Brazil, doing her pilot of first 50 Aqualuz filters in later 2018 and now serving over 10,000 people and having diversified her portfolio from 1 to 5 products. While most start-ups take time to become investment-ready and some will not make it (as in any incubation programme), without the training and funding provided by the YWF, those making a difference would probably have had a much more difficult path in getting where they are now.

In this sense, we are happy to read in the report that **the auditors find that the programme is effective in reaching its primary goal**, as indicated in the following comments: "*The project follows a need-based* *approach vis-à-vis their primary target group – the youth – and provides them with tools and skills to tackle the challenges related to access to safe water and sanitation in their own community. The project empowers them as actors of change, increases their confidence and ability to adopt an entrepreneurial approach to solve problems*'' and ''*The transfer of know-how with the entrepreneurs interviewed has been impressive. Fellows from the sample all learned a lot, especially on the business side, as most of them already had a WASH-background. For very early-stage companies, there is no doubt that there was a transfer of know-how and fellows got an opportunity they would otherwise not have benefited from.*''

"Very few SWE supported through the different projects are sustainable or creating large-scale social or environmental impact. The large majority of supported SWE however have not reached a scale with relevant impact and financial viability" (p.33)

The management considers it unrealistic to expect that start-ups still in validation phase, or within a year or so of having finished their pilot projects (in the case of the YWF 2018 and 2019 start-ups), can be expected to have achieved investment-readiness and scale, especially given that the programme is not designed for such a goal (which would require significant additional funding provided to start-ups).

The strong focus on investment-readiness is also present in comments such as *''Most businesses have not reached a financially sustainable situation. Most of them are still heavily dependent on upfront funding to realize capital expenditures, and many are looking for grants to do so'' (p.33); ''(…) most of them are not investment-ready (i.e. have validated their product/market fit, their revenue model, have a large and stable consumer base)'' (p.33).*

By the time the audit took place, 80% of the start-ups were still implementing their pilot projects (most of them delayed by COVID-19 lockdowns), national editions had started only a few months before, and most ecosystem engagement activities, the acceleration programme and the impact measurement efforts were yet to start. While this is briefly mentioned in the report, most findings about the programme's effectiveness seem to consider that it is possible to evaluate the financial stability and scalability of start-ups still in the validation phase, which is generally not the case for any start-up in the first couple of years, regardless of the sector or location they operate in. This view is supported by auditors in section 5.2 *Lessons learnt related to scaling up business models and market-oriented formats*, where it says that ''*businesses in challenging sectors such as WASH and set up in emerging countries can take up to 10 years before achieving strong product market-fit, ensuring regular and sustainable revenues and starting to scale*'' (p.50). This contradicts all other statements that evaluate the YWF by its capacity to have taken its start-ups to investment-readiness in a short term.

Additionally, it is important to mention again that the main focus of the YWF is not business scalability and profitability, but youth empowerment, and that **it is not the programme's goal to scale-up the 53 start-ups supported**, but only the few that are ready for it and participate in the acceleration programme.

"The potential for uptake and wider dissemination in terms of institutional framework and public sector engagement remains low, as there has been low exposure of the project to those authorities".

The multiple comments about the low ecosystem engagement are relevant only to the Global and East African editions, as a strong stakeholder and public sector engagement was incorporated in the 2020 national editions. However, this updated strategy was not considered in this audit's analysis. We fully agree with auditors that creating linkages between Fellows and stakeholders in the ecosystem is fundamental for their success; however this has proven to be very difficult in global and regional editions, the reason why the focus of the programme has shifted to national ones in 2020 that include at least three stakeholder meetings per edition. The first one of these was implemented in Dakar in November 2020, where 60 stakeholders came together to discuss improvements in the water-entrepreneurship ecosystem, followed by Fellows' pitches and a networking cocktail event. The second stakeholder meeting is taking place in July, hosted by the Ministry of Water and Sanitation.

Although as the auditors rightly say, it is too soon to assess the impact of changes introduced in national editions, the management wants to highlight that this ecosystem development component has, since 2020, been a core component of the YWF and will continue to be. The YWF East Africa is in this regard not fully representative of the latest format of the programme.

We do however believe that the following claim may prove to be true by the end of the programme ''***The project did not support the development of new policy or legal frameworks (Q14)" (p.30).*** The development and adoption of new policies or legal frameworks are complex and time consuming processes, therefore it is safe to say that it was extremely ambitious to expect the materialization of such frameworks within the timespan of the programme, especially given that there was no national focus from the beginning. Moreover, due to the COVID-19 crisis, youth empowerment is not a priority focus for most countries at the moment, making the goal to have new policies that support youth entrepreneurship difficult to achieve by the end of 2021.

''Although not a specific goal of YWF in the first phase, the project's contribution to the overall objective of advancing towards SDG 6 is nevertheless marginal, as the reach and depth of impact, as well as its lasting effects, are not demonstrated (p.28)

Impact on SDG 6 is marginal only if the point of reference is the global WASH needs and delivery gap in the implementation of SDG 6. While the programme was clearly designed for its unique potential to catalyse and roll-out innovative approaches and WASH solutions in the first place, for a 3-year programme that supports youth-led early stage social businesses, we do believe there has been a significant contribution to SDG 6 in the communities where pilot projects have been implemented. In terms of immediate and initial impact, 30,000 people are expected to improve their access to WASH. This does not consider the impact start-ups have in later stages, through business growth or replication of innovative solutions and approaches. Fellow Anna Beserra engaged only 50 families in her pilot, but has reached over 10,000 people after the pilot concluded. Data about this longer-term impact is currently being collected as part of the Impact survey.

"The funds are efficient to create a targeted impact for the entrepreneurs and a small community, but it is not efficient for the purpose of creating sustainable businesses. (Q15)" (p.31)

The purpose of the seed funding grant is to help entrepreneurs without access to other resources to validate the impact they assume they have with their solutions and make the first steps to prove their value propositions and launch their businesses, while already starting to benefit a vulnerable community. It is certainly not enough to create sustainable businesses (multiple times the amount granted would be needed for that). It is not its purpose either. The purpose is to facilitate a pilot that can be used as a proof of concept to leverage more support and get more clients. While we agree it is sometimes not enough for a full pilot (in the case where infrastructure needs to be built, for example), the grant has helped many Fellows get further financial support. For example, 60% of Fellows from the YWF 2018 and 2019 editions used the YWF grant and pilot projects to leverage more funds.

We consider the funding to be a core component of the YWF and one that differentiates it from most incubation programmes that only offer business support to start-ups that never get established due to not being able to spend resources to prove their impact. Some of our Fellows had already participated in such programmes.

We are happy to read however that the auditors found that ''*Each pilot positively impacted the living conditions of a set of end beneficiaries (up to 4'000 in some cases), and the funding received by the fellows made a significant difference in their personal and professional development*''.

"Overall, most of the outputs of the project have been achieved", ''some other outputs were partially achieved"; ''outcomes are partially achieved" (p.29 and 30)

Given that the programme is ongoing, we do not agree with outcome statements that give the wrong impression that the programme was already complete at the time of the audit. As indicated in the breakdown of those same output/outcome statements, *''it is too early to say whether they "effectively offer sustainable solutions…"; ''it remains to be seen whether this leads to a lasting involvement of young people to provide solutions to water related challenges''*. As this rightly indicates, outputs and outcomes cannot be fully assessed 8 or 9 months before a programme's completion.

''Overall, we find that the project has not been cost-effective in the sense of creating sustainable businesses that are financially sustainable; create large scale impact and are at a stage where they could attract more private investors'' (p.32)

This statement, as well as ''*In conclusion this suggests that the project has not been cost-effective to help business go from an idea to create a business generating revenues*'' (p.32) contradict the analysis on cost-effectiveness by auditors on p.45, where it states that ''*There is too little data to properly assess the cost-effectiveness of the project for social enterprises, and the evaluators therefore do not provide any quantitative metric.''*

As indicated several times in this management response, it is not the programme goal to create 53 financially stable start-ups with large scale impact and investment in 3 years, nor it would be realistic to expect so.

Cost-effectiveness of this programme from our perspective should be calculated in terms of youth empowerment on SDG 6, its core goal, to which we are happy to see that auditors consider as high: ''*The programme' s cost-effectives to support a range of different youth initiatives **is rated high**, as the programme has supported a total of 63 entrepreneurs of which 53 by SDC funds''* (p.45)

The implementing organization of the project has consolidated over the years. Overall, its sustainability past the YWF programme is not ensured. (Q18) (p.34)

The first contract with SDC was agreed only 6 months after launching the first YWF edition in 2017, with only one part-time staff member at the time. In 3 years, YWS has managed to almost triple its partnerships and grow its annual budget by 500%, in big part due to SDC's support of the programme, for which we are deeply grateful. Although it is true that SDC is the main funding partner of YWS and accounts for about 50% of its funding, in a scenario where SDC discontinues its support, YWS would reduce the number of YWF editions being implemented and staff to match available funding. Should this happen, the YWF would probably change some of its current components if funding is scarce, taking into account that there are certain programme outputs (such as ecosystem development) that are a priority for SDC but not for other donors and therefore more difficult to fund.

However, it is unlikely that YWS would disappear, as in the past years it has engaged in programmes outside the YWF.

''Given the limited resources allocated to the engagement with the public sector as well as YWS' limited experience and know-how to do so…'' (p.39)

The basis for the assumption that YWS' experience in working with the public sector is limited, is unclear and not substantiated in the audit report n. YWS management and YWF team members have worked in the past not only from inside, and with, the public sector in developing countries, but also leading multi-stakeholder processes. The lack of emphasis on public sector and ecosystem engagement in the first editions of the programme was linked to the difficulty of doing so effectively and efficiently with a global or regional scope, with limited resources and without being nationally rooted, rather than being linked to a lack of experience and know-how.

4. Response to the SWOT analysis

STRENGTHS

We are happy to see that the strengths identified are related to the programme's effectiveness in empowering youth to solve WASH issues in their communities and provide access to resources they would not otherwise obtain. This is the main focus of the YWF and it is reassuring that the auditors found it to be the programme's strength.

WEAKNESSES

We agree with the following points:

The length of the training / coaching programme in the first regional edition (East Africa) was insufficient to fully equip young entrepreneurs with the right tools and necessary support to reach a relevant market scale. It remains to be assessed whether the reinforced coaching provided in newer national editions (Senegal; Ivory Coast) can support greater sustainability

The project's results at policy level were weak in the first editions (global and regional) – it is not YWS specialty or core competence to deal with public authorities. Strategy has evolved in subsequent editions and the results should be assessed at a later stage.

As indicated, these components were improved in 2020 editions and it is too early to assess impact.

We partially agree with the following points:

Young entrepreneurs are not necessarily experienced to deal with strong interference by the public sector which is typical to the water and sanitation sector

While this statement is correct, we do not necessarily see it as a programme's weakness, as not all entrepreneurs need to deal with public sector interference in early stages of their businesses. This depends on the nature of their business, the WASH issue they are tackling and the customer segments.

SWE create impact at the level of a community but this impact seems very difficult to scale beyond that community

Again, scalability depends on many factors and varies in each start-up. Start-ups with B2B2C models or B2C models focusing on BoP who cannot afford it will indeed have a harder time to scale, but some of the Fellows are proving it possible by diversifying. The acceleration programme also comes into place to support some of them in scaling and becoming investment-ready.

Difficulty to reconcile the objective of creating financially sustainable and impacting businesses with the objective of empowering youth

The core goal of the programme is to empower youth and initiate social businesses, not to create financially sustainable and scalable businesses in the one-year timeframe of each edition. We do acknowledge that it is more difficult to create youth-led, BoP-focused WASH businesses than other start-ups without those focuses, but that is the very reason why we implement the programme in the first place: to provide an opportunity for disadvantaged yet high potential individuals and start-ups to access resources and develop their idea, despite the multiple barriers placed in front of them.

We disagree with the following point:

Grant as a financial mechanism can provide the necessary head start entrepreneurs need to test their product; but this can also create a perverse effect to continue looking for grants as the business grows, without ensuring its financial sustainability.

We strongly disagree with the point that the grant provided by the YWF is a weakness of the programme; we consider it a strength, given that the auditors include as one of the core needs of SWE ''*Business training* *for very early-stage business ideas, pilot funding to start testing and developing their ideas''* (p.54, ''Key support elements that SWE need most''**).**

From our perspective, receiving a grant to test the product does not create grant-dependency. Without that, entrepreneurs would not even get as far as having tested their product as most do not have access to any financial resources and lack the personal capital to invest in their own start-up. Angel investors almost never invest in a start-up that has not yet proven impact. What provokes grant-dependency in our opinion is the BoP focus and lack of diversification, which makes a business model dependent on those who cannot afford the service. In such circumstances, grants are sometimes seen as an easy way to keep the business operational. We agree that this can lead to grant dependency and try to discourage our Fellows from applying for grants after the pilot. However, we disagree that the main cause is the small grant they receive for pilot testing.

OPPORTUNITIES

We agree with opportunities identified, in terms of the potential of the acceleration programme to continue to support Fellows, and are happy to see the approval of the shift from global editions to regional/national editions.

THREATS

We agree with the following point:

The core focus on BoP (< USD 2 / day) makes it very difficult for those businesses to be sustainable.

We partially agree with the following points:

Whether SWE are a key ingredient to reaching SDG 6 in the country of national or regional editions is an assumption rather than a conclusion from a need analysis; the rationale for the government to integrate SWE into their sector strategies needs to be strengthened

We agree with the need to strengthen the assessment of the ecosystem and public policies. However, before launching the editions in Senegal and Ivory Coast, YWS met government representatives in person and confirmed their support for the programme. The alignment of creating youth-led SWE and national government policies is therefore not entirely based on assumptions.

There are few structures (accelerators, funds) that are able to keep on working with the companies supported by the YWF, resulting in potential low efficiency in the use of funds in the long run.

As more accelerators and funds are shifting their focus to start-ups with high social/environmental impact, we believe that this statement is based on an assumption rather than evidence that there is no interest from other supporting organizations to work with WASH start-ups. Although it is true that start-ups focusing on BoP and therefore heavily dependent on grants may not meet the criteria for further support and investment from some actors, the growing interest in social business and entrepreneurship in general could be seen as an opportunity.

YWS heavily dependent on SDC funding (flagship donor), its financial sustainability is unclear

As indicated before, in a scenario where SDC would discontinue its support, it is unlikely the programme or organization discontinues, but rather reduces its operations to match available funding.

We disagree with the following points:

Risk that future national or regional editions do not partner with a local organization deeply embedded in the related entrepreneurial ecosystem, potentially jeopardizing the success of the future edition

Partnerships with well connected local incubators are now a core part of the programme and a condition for launching an edition in any country/region. We therefore disagree that this is a threat.

5. Response to key recommendations at project level

We once more thank the auditors for their insights. We express our agreement with most recommendations. While some have already been incorporated in 2020 editions, others have given us important ideas to consider.

Focus on countries and regions: We agree with this approach, and we are already incorporating stakeholders and policy mapping in new editions.

Design elements - Training duration and format: We agree with the suggestion to divide the training in two tracks, and are already incorporating it in all 2021 editions. While we intended to do it already in national editions in 2020, due to the travel restrictions and the pandemic we decided to combine the two weeks of training to reduce the chances that YWS and cewas would be prevented from travelling. In terms of coaching support, until now it was always on demand. If however Fellows would not reach out for weeks, YWS would actively propose coaching calls. We do agree with auditors however that scheduled regular coaching (bi-weekly, for example) would provide better results, as Fellows are often shy to request support. We will therefore incorporate this in all 2021 editions.

Design elements - age limit: Given that the YWF is a youth programme, the management does not agree with the advice of taking the age limit to 40 years old, as there is hardly any country in the world that considers 40-year old citizens as "youth". However, we can explore this question in certain national contexts (if it is recommended by local partners, for example) and consider extending the age limit to 35 year-old entrepreneurs, if agreed with the programme's funding partners and in line with national policies (the African Union considers youth up to 35 years old).

Acceleration programme: We are happy to see the recommendation to continue supporting start-ups with potential to become investment-ready. As we intend to focus on pipeline development in specific countries/regions as the way forward, we see future acceleration programmes also happening in the future at that scale, rather than at global level.

Engagement with the public sector: We agree that more resources need to be allocated to this component for a substantial impact in this regard, as already identified in 2019 and included in 2020 editions. Implementing YWF editions in SDC-priority countries may increase the possibility of support from SDC for this effort, and this is already being considered in the planning of upcoming editions.

Data collection: We agree with the need for more systematic data collection and are reviewing this strategy. While the first Impact Survey is getting underway in mid-2021 (as before only one YWF edition had been fully completed), we acknowledge the need to have a more systematic impact-data collection in coming years.

6. Response to recommendations at portfolio level

The management agrees with most recommendations given by the auditors to SDC about how to improve its portfolio in the future. Comments on those we disagree with and/or those of high relevance to the YWF follow.

Focusing on acceleration

While we acknowledge the need to continue to offer technical and financial support to successful start-ups previously supported through the YWF and other incubation programmes, we strongly disagree with the suggestion to focus on acceleration only for the following reasons:

1) In most SDC priority countries there is no pipeline to only target existing water and sanitation enterprises ready to scale. Some of our partners that focus on funding to scale (such as Aqua for All), often have to support additional incubation efforts to prepare start-ups for their acceleration programmes. We believe

SDC should focus its support on wherever the gaps in the pipeline are: in some countries that may be ideation/incubation, while in others it may be acceleration.

2) Focusing on acceleration only would mean implementing programmes exclusively in countries with a strong entrepreneurial ecosystem. Not only is this not the case for most SDC priority countries, but also it would be missing the opportunity to support ecosystem building in countries that need it most. In those cases adjusting expectations about the success rate of start-ups may be needed, but those start-ups supported would certainly help make the case to the private and public sector about the importance of supporting water and sanitation enterprises, paving the ground for those who come later.

3) Lastly, many, if not most established start-ups in Africa are founded by entrepreneurs from high income countries, as found in The Guardian's article, and WASH start-ups are not the exception, as it is the case of Sanergy, Sanivation, Spouts of Water, Jibu, to mention only some known. If SDC was to focus on investment-ready social enterprises only, it would be reinforcing this trend, opposed to focusing on locally-run start-ups that need support to emerge and consolidate.

Since 2020, YWS is adding a strong ecosystem mapping to support the decision on where to implement YWF editions, to better understand which section of the pipeline needs strengthening in each case and provide more tailored support. Regarding the YWF focus, it makes sense to continue to offer acceleration support as part of the ''YWF combo''', to help some of the incubated start-ups from previous editions get investment-ready, while continuing to support young entrepreneurs in the validation process of their start-ups.

Geographic and bottom-up focus

We agree with the recommendation that SDC should focus on certain countries/regions opposed to any country in the world. We are adopting this recommendation for future editions and, as mentioned, we are in the process of mapping several regions in Africa and Asia to make an informed decision when planning future YWF programmes.

Once more Young Water Solutions takes this opportunity to thank the auditors and SDC for the audit performed, which will help strengthen the YWF in the future. Our management remains available if clarifications or comments are needed.

Kind regards,

Antonella Vagliente
Director General
Young Water Solutions