Promoting Social Water Entrepreneurship

RésEAU Brief no. 2
December 2021
Dear colleagues

It is with great pleasure that I present the second edition of the RésEAU Brief series, a medium to share the SDC’s learnings from water related projects and programmes at the global level. This second edition focuses on Social Water Entrepreneurship and presents the key findings and analysis of a review of the SDC’s engagement in Social Water Entrepreneurship over the last decade.

Social Water and Sanitation Entrepreneurship – a complementary approach to achieving SDG 6

The SDC defines Social Water Entrepreneurship (SWE) to include formal or informal entities delivering market-based activities in water, sanitation and hygiene (WASH), irrigation, climate protection and adaptation, and hydroelectricity. Social Water Entrepreneurship complements other approaches to achieving SDG 6 while focusing on closing the access gaps for the most marginalised and underserved communities. The SDC through its Global Programme Water (GPW) has been among the first development agencies to help social water and sanitation entrepreneurs contribute to achieving the Sustainable Development Goals (SDGs). In 2021, the SDC commissioned an external review of its engagement in Social Water Entrepreneurship over the last decade through a number of different projects.

This RésEAU Brief introduces the six projects reviewed, the different approaches pursued, how they have been implemented, and what they have achieved. It also outlines the successes, failures and challenges along the road. While there are outstanding examples of social water and sanitation 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 the SDC started framing and advancing the agenda of promoting social entrepreneurship in WASH. The project results are mixed, and some of the projects show rather limited long-term effects for SWE and for the development of a thriving SWE environment. While some projects have provided WASH solutions for large numbers of beneficiaries, raised follow-on investments and created numerous quality job opportunities, only a few are sustainable or are showing large-scale social or environmental impact. A more tangible result has been the creation of self-employment opportunities and building capacities of entrepreneurs and other ecosystem actors. The projects supported by the SDC have mainly focused on ideation and incubation efforts, which take continuous efforts to develop an effective pipeline of successful entrepreneurs, a long time for the enterprises to mature, and in consequence significant resources.

The results and analysis outlined in this RésEAU Brief serve as basis for discussion of the future strategic and operational focus of the GPW and its future involvement in the field of SWE, and propose a concrete contribution to the principles of engagement of the SDC with private and investment actors.

I would like to thank the review team from Sagana and EBP Schweiz for the comprehensive assessment, the SDC colleagues involved in this capitalization exercise, the designers from Zoï Environment Network, and everybody else who contributed to this second edition of the RésEAU Brief dedicated to SWE. I wish you happy reading!

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For more than a decade, SDC through its Global Programme Water (GPW) has been among the first development agencies to help social water and sanitation entrepreneurs contribute to achieving Sustainable Development Goals (SDGs). The SDC commissioned an External Review of the Social Water Entrepreneurship (SWE) Portfolio of Projects, which documented valuable lessons and developed strategic recommendations on how to further engage in social water and sanitation entrepreneurship.

The GPW portfolio of social water and sanitation entrepreneurship* projects grew organically, and reflects the retrospective realisation that SDC has engaged in thematically similar projects that 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 economies, and improving health protocols for sludge management. In one way or another, all the projects involve approaches to initiating, incubating and accelerating business models for water and sanitation services, wastewater treatment and the efficient use of irrigation water. The projects may also build upon and strengthen the entrepreneurial environment in which they operate.

The results and analysis outlined in this document serve as basis for discussion of the future strategic and operational focus of GPW and its future involvement in the field of SWE, and propose a concrete contribution to the principles of engagement of SDC with private and investment actors.

* The SDC defines Social Water Entrepreneurship to include formal or informal entities delivering market-based activities in water, sanitation and hygiene (WASH), irrigation, climate protection and adaptation and hydroelectricity.
The projects

Fostering regional entrepreneurial and market development for Sustainable Sanitation and Water Management (SSWM) in the Middle East

Since 2016, the cewas Middle East programme has provided incubation services and business coaching for green entrepreneurs, has increased practical knowledge and has fostered demand for SSWM solutions. In its first phase, the programme strengthened local capacities and increased employment opportunities in water, sanitation and resource management, including a special focus on emergency response. It also strengthened the role of private providers who initiate and implement innovative and sustainable projects. In its second phase, the programme is creating an enabling environment and increasing demand for SSWM, and is assisting entrepreneurs to develop, sustainably implement and scale their SSWM solutions.
Young Water Fellowship (YWF) Programme

Young Water Solutions, Belgium

The YWF programme provides business training and seed funding to young social water entrepreneurs in selected regions. The YWF seeks to empower young people as change agents able to provide locally sourced solutions to solve pressing water, sanitation and hygiene (WASH) challenges. The programme creates opportunities for young entrepreneurs who traditionally do not have access to those resources.

project period


SDC contribution

CHF 1.15 m

CHF 0.52 m
**Swiss Blutec Bridge (SBB)**

*Strategos SA and FinanceContact, Switzerland*

SBB has accelerated sustainable access to safe drinking water and sanitation for the most vulnerable people in rural areas and small cities in emerging economies or developing countries by providing entrepreneurs with Swiss technology and innovation, co-funding and training.

**Project period**

- **Phase I**
  - 2010
  - 2012
  - 2014
  - 2016
- **Phase II**
  - 2018
  - 2020
  - 2022
- **Phase III**

**SDC contribution**

- CHF 6.50* m
- CHF 3.92* m

*Budget figures only cover Phase I and II of the SBB project. Phase III does not involve significant costs.*
Rethinking Sanitation Systems: Resource Recovery and Safe Reuse (RRR)

GiZ, Germany and EAWAG, Switzerland

The RRR project promoted and implemented models for the recovery and safe reuse of resources from liquid and solid waste streams at a commercial scale. The implementation of RRR business models contributed to food security, cost recovery and livelihood opportunities, while helping safeguard public health and the environment in poor urban and peri-urban areas in Uganda and Peru.

Project period

<table>
<thead>
<tr>
<th>Year</th>
<th>Phase I</th>
<th>Phase II</th>
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<tbody>
<tr>
<td>2010</td>
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<td>2012</td>
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<tr>
<td>2014</td>
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<td>2016</td>
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<td>2018</td>
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<tr>
<td>2020</td>
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<tr>
<td>2022</td>
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</tbody>
</table>

SDC contribution

CHF 7.60 m

CHF 8.8 m*

* Budget figures are not available for phase I of the RRR project.
Scaling up Safe Water (SUSW)

Antenna Foundation, Switzerland

SUSW helped improve access to safe water in rural households, contributed to the realisation of the human right to water by improving the entrepreneurial environment for WASH businesses and by scaling up the application of household water treatment solutions.

project period

Phase I


Phase II

SDC contribution

CHF 2.34* m

SUSW

* Swiss contribution and thus total budget figures are not available for phase I of the SUSW project.
Scaling up Productive Water (SUPW)

SUPW worked to increase smallholder income and water efficiency in selected regions by facilitating the growth and higher impact of smallholder initiatives at local and regional scales, and by supporting the replication of productive water technologies, tools and market-based dissemination approaches at the global scale.

**project period**

- **Phase I**: 2010, 2012
- **Phase II**: 2014, 2016, 2018, 2020, 2022

**SDC contribution**

- **CHF 65.0 m**
- **CHF 10.3 m**
What the projects have tried to achieve

The six projects followed the same overall objectives of contributing to either SDG 6 (water) or SDG 8 (decent work and economic opportunities), but aimed at a variety of outcomes and differed slightly on impacts.

<table>
<thead>
<tr>
<th>Project</th>
<th>Approaches and outputs</th>
<th>Intended Outcomes</th>
<th>Intended Impact</th>
<th>Intended focus on systemic change *</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSWM</td>
<td>Training, coaching, networking, incubators, ecosystem engagement</td>
<td>1, 2, 3, 8</td>
<td>A, B</td>
<td>Absent in phase 1 Strong in phase 2</td>
</tr>
<tr>
<td>YWF programme</td>
<td>Training, coaching, networking, pilot grants, ecosystem engagement</td>
<td>1, 4, 8</td>
<td>B, C</td>
<td>Strong</td>
</tr>
<tr>
<td>SBB</td>
<td>Loans, coaching, networking</td>
<td>5, 6, 8</td>
<td>A, B</td>
<td>Absent</td>
</tr>
<tr>
<td>RRR</td>
<td>Training, networking, coaching, engagement with public sector (Kampala)</td>
<td>1, 7, 8</td>
<td>A, B, D</td>
<td>Strong</td>
</tr>
<tr>
<td>SUSW</td>
<td>Networking, coaching, small grants, policy dialogue</td>
<td>1, 2, 5, 6, 8</td>
<td>A, B</td>
<td>Limited</td>
</tr>
<tr>
<td>SUPW</td>
<td>Coaching, marketing support, technical R&amp;D, supply chain development (agriculture)</td>
<td>1, 8</td>
<td>A, D</td>
<td>Limited</td>
</tr>
</tbody>
</table>

* Systemic change means an explicit focus on shaping or transforming the entrepreneurial environment, including systemic and framework conditions.

### Table legend

**Intended outcomes**

<table>
<thead>
<tr>
<th>Number of projects</th>
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<tbody>
<tr>
<td>1</td>
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<td>3</td>
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<td>6</td>
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<td>7</td>
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<td>8</td>
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</tbody>
</table>

**Intended impacts**

<table>
<thead>
<tr>
<th>Number of projects</th>
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</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
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<tr>
<td>C</td>
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<tr>
<td>D</td>
</tr>
</tbody>
</table>
How

the projects have been implemented

The projects all include training, individual or organisational coaching, knowledge-brokering and networking, but differ by the level of financing and type of financing mechanism. Some foresee no grant funding for prototype development or testing (SSWM, RRR in Lima and Kampala); others receive grants of a few thousand Swiss Francs for developing and piloting prototypes or expanding products (YWF, SUSW, SUPW); and SBB provided loans up to CHF 250,000.

SDC mainly experimented with grants and loans, leaving room to explore and promote other finance formats and instruments (such as social impact incentives or impact-linked financing) in future interventions.

• **Grants:** Tools particularly appreciated by entrepreneurs and critically needed in early stages to pilot and prove product-market fit, but can undermine the financial sustainability of the social enterprises and create cultures of dependency where the business models depend on them to sustain themselves.

• **Loans:** Adequate for profitable companies that plan to grow and scale up. Setting the right terms and ensuring good management of the funds are essential, as are robust due diligence processes and continued (technical) support of the entrepreneurs.

The figure below presents the stages of a typical business development path, and the ranges covered by the projects supported by SDC.
Results

While there are outstanding examples of social water and sanitation 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 the SDC started framing and advancing the agenda of promoting social entrepreneurship in WASH. The project results are mixed, and the completed projects show rather limited long-term effects for social water entrepreneurship and for the development of an SWE environment. The ongoing projects (SSWM, YWF) show promising achievements at the output level and a rather mixed outlook at the outcome levels. Cost-effectiveness of the projects is diverse, ranging from high (SSWM, YWF) to mixed scorings (all other projects) – and is not easily comparable.

While projects were designed to contribute to SDGs, creating self-employment opportunities has been a more tangible result compared to the results for water management, improved water and sanitation services, or health. Return on SDG impact was difficult to assess due to a lack of solid impact measurement mechanisms in the projects.

While some projects have provided WASH solutions for large numbers of beneficiaries, raised follow-on investments and created numerous quality job opportunities, only a few are sustainable or are creating large-scale social or environmental impact. A more tangible result has been the creation of self-employment opportunities and building capacities of entrepreneurs and other ecosystem actors.

Objectives and work modalities have varied across the six projects in the portfolio, with mixed results in terms of relevance, effectiveness, efficiency, sustainability and impact. SDC has focused on ideation and incubation efforts, which take continuous efforts to develop an effective pipeline, a long time for enterprises to mature and in consequence significant resources. Timeframes were usually underestimated. Few of the social water entrepreneurs can effectively grow, scale up or create more access to water and sanitation for all within the projects’ funding periods, but this early-stage investment has allowed social water entrepreneurship to grow in places where it has not been on the radar.

The projects have offered products and services that have contributed to a range of water and environmental outcomes, many of which go beyond the traditional WASH focus, and all but one project focused on rural communities.

What went well?

- SDC’s long experience in the water and sanitation sector helped guide the projects.
- Most projects achieved their intended results at output levels.
- A few SWEs have achieved significant impact and raised follow-on investments.
- Projects increased the number and quality of job opportunities.
- Projects decreased the dependence on public services through self-initiative and community mobilisation.

What did not go so well?

- Some projects had too many objectives and were thus not targeted enough to create their intended impact.
- For several projects, the engagement of projects and implementing organisations with the local enabling environment was insufficient to reach the potential for lasting effects.
- Few SWEs have yet proven financial sustainability or have delivered significant impact.
- The lack of geographical focus precluded ecosystem development and strong ties with local partners.
- Some business ideas were not sufficiently scrutinized early on to determine whether they were environmentally sound.
Landscape of SWE products and services

Coloured boxes
Products and services which were initiated, incubated or further developed within the six SWE portfolio projects.

Non-coloured boxes
Possible products and services which were not found or not yet realised.

* Water-energy nexus: products and services using or producing renewable energy
Challenges

**Context**
Few investors offer long-term capital with high risk and below market returns, so SDC and other development agencies are trying to fill this gap by acting as risk-bearers supporting SWEs at early stages of enterprise development and are working to prove the business case and to create the conditions to attract more traditional investors.

Across the globe, public authority for water and sanitation services extends to the regulation of water quality standards, tariffs and service providers, and powerful political interests come into play. In addition, water is linked to religious beliefs, cultural values and historical identity. Given this context, the private sector is justifiably cautious about entering the market.

**Business rationale**
The consequences of poor water and sanitation services – adverse public health and environmental effects, to name the obvious – and challenging socio-economic developments (e.g. effects of the Covid-19 pandemic) often don’t make a sufficient case to swiftly increase the willingness to pay of targeted (Base of the Pyramid) customers. In many contexts, customers don’t like to pay for water, however, they pay for convenience (such as aspirational filters or home delivery of water).

**Finance**
The level of engagement of the financial sector in social entrepreneurship in water and sanitation is still low, as this sector does not offer commercial investors – even impact investors – an attractive financial return, and the potential for large-scale dissemination and uptake via private investors remains low. The trend that few outstanding social entrepreneurs become investment-ready continues, and the expectations gap related to impact and profitability between investors and entrepreneurs remains wide, and is thus hampering the creation of the long-term intended impact.

**Business models**
The financial management of early-stage social entrepreneurship business models is often weak, and the business models may be difficult to scale up. The strong focus on low-income customers is an inherent limitation, calling for approaches that seek to leverage local solutions to address the access gaps for the most marginalized and underserved communities. Uncritically bringing Swiss technologies or business models into the global South may result in increased transaction costs and lower cost-efficiency. Finally, progress may be hindered if SDC’s implementing partners try to become market players themselves rather than facilitate entrepreneurial development.

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**Key support that SWEs need**
- Business training for early-stage business ideas, pilot funding for testing and developing ideas, capacity building to help start a company and mentoring during start up
- For more advanced companies, structured coaching and targeted technical assistance throughout the course of the project to grow and scale up and to address challenges
- Financing targeted to the needs or stage of the company
- Connections to public authorities, business actors, NGOs and investors
- Advice in establishing simple but effective impact measurement systems for discussions with impact investors

**Public policy**
Strong public interest and government authorities almost always influence water-related services and products. In the highly regulated WASH sector, social enterprises need strong ties with public authorities, including local municipalities and utilities. Yet, in general, engagement at the level of governance was not a key component in the projects, which often lacked strong engagement with authorities on policy and strategic development.
**The way forward**

Social water entrepreneurship complements other approaches to achieving SDG 6 while focusing on closing the access gaps for the most marginalised and underserved communities. The contributions of SWEs with regard to reaching SDG 6.1 and 6.2 are often indirect, complementing the limited capacities of public authorities, increasing the efficiency and affordability of public services and often only after an extended period generating direct SDG 6-related impact. New interventions call for a thorough analysis of needs at the national and regional levels to establish an evidence base for determining where social water entrepreneurship offers an alternative or complementary solution to public service providers.

SDC’s Global Programme Water faces choices across a range of intervention issues related to social water entrepreneurship – how to reach the most people, which stage projects should focus on, whether to take a global or location-specific approach, how to strengthen links with the public sector and NGOs, and how to develop and select the best financing mechanisms.

**Leaving No One Behind**
A fundamental principle of development cooperation is Leaving No One Behind (LNOB). Current SWE approaches struggle to navigate the trade-offs between market mechanisms and the objective of closing the gaps for low-income people who lack access to safe and reliable services. The key question is where SDC wants to focus its efforts:

- The last mile with a focus on socio-economically deprived segments of society: Targeting informal settlements and peri-urban and rural areas where people are not connected to piped systems and will not have access in a reasonable amount of time due to the structural challenges of providing public water services; or
- Creating a critical mass of entrepreneurs in a specific country or region by working across segments of society, to develop a critical mass of solutions and services complementary to the public services and to boost systemic change, potentially at the expense of an exclusive focus on LNOB.

**Acceleration vs. incubation**
The case for a focus on the acceleration stage starts with the opportunity for building on previous project successes. This approach could work to close the funding gap that SWEs face after the incubation stage by building a network of investors or by using capital reserves for investments to accelerate growth. SDC could continue working through project implementers to accelerate selected social enterprises that were supported through previous projects, or could support already well established, sustainable social enterprises with the potential to grow and scale up. The rationale for investing in those companies would be to reach higher social impact targets and to build a stronger case for the benefits or added value of SWE in general.

The challenges of focusing on acceleration include a lack of a sufficient number of SWEs ready to advance to the acceleration stage, the fragmentation of SWE investors, and the transaction costs of investments in the acceleration stage. Efforts would need to be intensified to make SWEs investment-ready and to engage new investors to enter the market for a longer period of time. Ultimately, this approach may result in attracting more private capital to the WASH sector, and thus create more impact at a larger scale.

**Leaving No One Behind**

The case for a focus on the incubation stage starts with the same rationale that animates the efforts to date – that investing SDC’s limited SWE resources in training, coaching and technical assistance together with ecosystem development and matchmaking can create significant impacts. Successful incubation, however, leads to acceleration and scaling up with much larger investment needs. Whether SDC will be in a position to invest itself substantially in SWEs remains questionable. In order to fulfil its traditional role as a catalyst, however, it could focus on building an entrepreneurial pipeline and facilitating investments between SWEs and larger private and public financiers.

The incubation and acceleration stages are equally important, and a focus on acceleration makes sense where there are enough SWEs ready to move to that stage. Otherwise, a focus on incubation makes more sense.

**Geographic considerations**
The promotion of conditions conducive to social entrepreneurs is extremely important, and must be rooted in a continuous and long-term engagement with national and local partners, particularly municipal governments and water utilities. In some contexts, municipalities are the main driver of development planning and implementation. Engaging with municipalities provides multiple opportunities for SWE to contribute to broader strategies linked to local economic and social development. The specific circumstances of the water sector vary from place to place, so SDC needs an understanding of WASH issues and the funders and investors in each area where it operates, and needs to recognize that
it may not be able to replicate a successful strategy from one geographic area to another. Strong local SDC presence or at least strong local presence of implementing partners is likewise important.

Given SDC’s limited resources, it should target selected countries or clusters of countries where it can have a sufficient effect on the entrepreneurial ecosystem and markets. Locality matters.

The public sector and NGOs

An intentional multi-stakeholder approach, strong engagement with the entrepreneurial ecosystem, and the choice of the appropriate partners with the necessary expertise or experience appear to be the key elements in projects with lasting impacts.

This work might include:

- Identifying, showcasing and promoting the benefits of SWEs as producers of complementary services or products or creators of new markets rather than competitors with public services;
- Ensuring collaboration and communication with municipalities and/or utilities. SWE should be part of bigger multi-sector municipal planning exercises, consulted by all stakeholders including end beneficiaries;
- Ensuring strong backing by local authorities to ensure coordination and integration of SWE into bigger ecosystems, city planning and the local financial ecosystem;
- Working with “intrapreneurs” – individuals working in government agencies and interested in entrepreneurial ideas;
- Encouraging established water service providers to adopt SWE innovations;
- Advocating for opening public procurement for (often small) SWEs.

SDC should support engagement processes that bridge the gap between traditional WASH actors and SWEs to facilitate better alignment of innovations with sector needs and leverage the uptake of entrepreneurial solutions.

Financing mechanisms

The unintended effects of financing instruments can include the dependency created by grants or the prospect of bankruptcy resulting from loans taken prematurely or poor loan management. As entrepreneurs develop their companies, they need to avoid grant-seeking behaviour in favour of generating and diversifying their revenue streams.

SDC should incentivise and facilitate access to innovative financing instruments, for instance by catalysing impact-oriented growth through revenue-based loans, social impact bonds, or performance-based contracts. Structured approaches to ensure proper evaluation (depth of the due diligence process; using the right kind of instruments depending on the company’s situation) and market intelligence should be further developed. It should also explore the potential of outcome-linked financing to promote entrepreneurial spirit and innovation.

Switzerland is host of a strong and vibrant community and network of impact investors, a high number of high networth individuals as well as philanthropy foundations. This unique ecosystem stands out internationally, complementing other investment opportunities available for social enterprises.

SDC should seek synergies with other donors and funders and establish joint programmes by partnering with other organisations (donor agencies, development banks, family offices) to launch investment instruments and acceleration or capacity-building programs dedicated to access to safe water and sanitation.
Build ties with the impact investment community. The community of impact investors active in WASH is small. An entry point could be to map the landscape of active investors in this space and their key focus, and to look at how to integrate these actors in the projects that are supporting social entrepreneurs.

SDC can use the unique Swiss investment ecosystem to leverage further for its own goals.

### Actors financing social enterprises and their approaches

<table>
<thead>
<tr>
<th>Type of actors</th>
<th>Main approaches</th>
<th>Scaling (examples)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donor agencies</td>
<td>Technical assistance, finance through various instruments; networking; governance, incubation programmes and challenges funds (nexus with other sectors, in particular food or energy)</td>
<td>SDC, GIZ, SIDA, USAID</td>
</tr>
<tr>
<td>Wealthy individuals, family offices</td>
<td>Funding (angel investors), mentoring</td>
<td>Various</td>
</tr>
<tr>
<td>Foundations</td>
<td>Technical assistance, networking, funding</td>
<td>Bill and Melinda Gates Foundation</td>
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<td>Stone Family Foundation</td>
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<td>Conrad N. Hilton Foundation</td>
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<td>Vitol Foundation</td>
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<tr>
<td>Specialized WASH sector funds</td>
<td>Funding usually coupled with technical assistance</td>
<td>Aqua for All, WaterEquity, Danone Communities</td>
</tr>
</tbody>
</table>

**Scaling (examples)**

- SDC, GIZ, SIDA, USAID
- Various
- Bill and Melinda Gates Foundation
- Stone Family Foundation
- Conrad N. Hilton Foundation
- Vitol Foundation
- Aqua for All, WaterEquity, Danone Communities
The team of EnviCoPal is presenting their water filters to the trainers during a field visit in Palestine.

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