SAFE DRINKING WATER ENTERPRISES

An analysis of economic sustainability

by Danone Communities

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Contents

1. INTRODUCTION

1.1. DANONE

For Danone, safe drinking water should be accessible to all and environmentally sustainable. As such, we work to bring safe drinking water to vulnerable communities through the many social businesses supported by our fund Danone Communities, that has reached 10.6M people in 2022. Building on the expertise of Danone Communities, Danone is accelerating its impact, by launching the first public-private fund dedicated to safe drinking water, the Water Access Acceleration Fund (W2AF), with the aim to reach overall 20M people by 2025.

1.2. DANONE COMMUNITIES

Created in 2007, Danone Communities is an impact fund, scaling local social businesses to improve the health of vulnerable populations by giving them access to quality food and safe drinking water. In addition to long-term financial support, Danone Communities provides expertise, a network, and business support to the companies in which it invests. With this support, the entrepreneurs are able to sustainably grow their social impact.

1.3. WATER ACCESS ACCELERATION FUND

Building on the expertise of Danone Communities fund, Danone launched in 2023 with the asset manager Incofin, the Water Access Acceleration Fund (W2AF), the first safe water-focused blended finance impact fund. Danone's objective is to increase its social impact and catalyze more investments for this chronically underfinanced sector. Partnering with development banks, foundations and corporates, the new fund invests in safe drinking water businesses, that have reached maturity but are still showing high growth potential.

1.4. SAFE DRINKING WATER ENTERPRISES

Safe Drinking Water Enterprises (hereafter referred to as "SDWEs") are social enterprises headed by mission driven entrepreneurs targeting low-income consumers, with market based and sales driven approaches. Their aim is to address the issue of access to safe drinking water by implementing a long-lasting solution.

2. PURPOSE

Danone Communities has learned a lot from the 15 years of investment in the sector and collaboration with numerous Safe Drinking Water Enterprises. As part of Danone mission, to bring Health through safe drinking water to as many people as possible, Danone Communities promotes an open-source approach for the SDWEs Industry, sharing best practices through participation to events and organising entrepreneur focused workshops. We believe that the Gap to fill is at such scale that today the focus is on catalysing and accelerating investment in the sector.

We wanted to put forward the many learnings acquired, specifically with the following objectives:

1) To highlight conditions required for economic sustainability of different models of SDWEs

2) To finetune the due diligence process for investors or funders for SDWEs concerning the evaluation of business vision, organization & skills, and resource allocation

Through this analysis, the report aims to contribute valuable insights for stakeholders, policymakers, and practitioners working towards the sustainable provision of safe drinking water, ultimately fostering a deeper understanding of the dynamics surrounding SDWEs.

3. PROBLEM STATEMENT

SDWEs aim to provide access to safe drinking water to vulnerable populations at an affordable price. The constraint of affordability for the consumer requires innovative solutions and business models beyond the large-scale centralised public pipe model, leading to a wide range of models that includes water kiosks, water fountains, mini-grid systems, water filters, jug delivery and many more.

4. RESEARCH QUESTION

Which SDWE business models are economically sustainable in addressing low-income population within an affordable price? What are the conditions required?

5. CONTEXT

5.1. SAFE DRINKING WATER ENTERPRISES

There are various complementary solutions provided by Safe Drinking Water Enterprises to cope with accessibility constraints when water is not safe to drink at home.

The safe drinking water sector is dominated by centralised public pipe models, which is the recommended solution by the Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) to ensure safely managed access to water, with the objective to reach SDG6.1.

The need of 2 billion people lacking access and the funding gap to reach the target by 2030 with the optimal pipe at home have created opportunities for entrepreneur led ventures, to provide services to low income populations around the world.

At a global level, and specifically in countries where infrastructures are still in progress, developpement of pipe solutions are facing cost and maintenance issues to serve populations in rural areas, as well as informal inhabitants in urban and peri-urban context.

Safe Drinking Water Enterprises have emerged since the 2000s, headed by mission driven entrepreneurs targeting low-income consumers, with market based and sales driven approaches. Their aim is to implement a long-lasting solution, responding to the local lack of affordable access to safe drinking water.

5.2. AFFORDABILITY: A DETERMINANT FACTOR

Safe drinking water must not cost more than 3% of household revenues to be considered affordable. This determines the price and the subsequent business model for SDWEs targeting low-income consumers.

According to the UN, the cost of daily water consumption (1.8 litre per capita per day) should represent not more than 3% of the disposable household income.

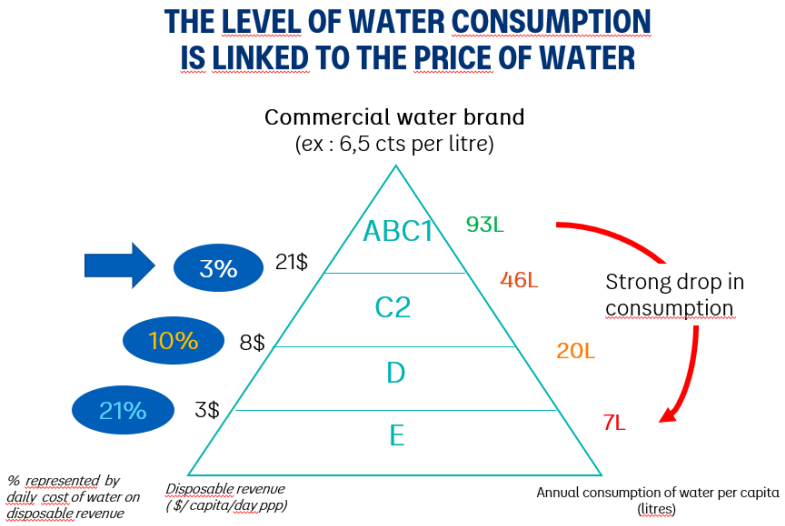
Individuals in countries can be classified by their socioeconomic levels (SELs). The SELs are defined by the per capita revenue PPP of the individuals (refer to glossary). We consider that low-income consumers are individuals of low SELs with a per capita revenue of 3$ to 8$ PPP.

In countries where tap water is not safe, individuals from high and middle (ABC1) and lower middle (C2) SELs usually have access to water packaged in jugs, bottles, or to individual RO[1] systems, solutions within 3% of their disposable household income. These solutions however are not always affordable for the lower SELs as they cost more than 3% of their disposable income.

The level of consumption of safe drinking water for any solution is affected by its price. For commercial water brands, we have data showing that penetration rate and level of consumption of water is directly linked to the disposable revenue of the consumer.

[1] Reverse Osmosis

Consequently, targeting vulnerable populations with affordable solutions requires alternative innovative business models to stay within the recommended expense.



5.3. MULTIPLE BUSINESS MODELS OF SAFE DRINKING WATER ENTERPRISES

We have separated the different business models into two categories:

- At Home: the SDWEs providing a solution for consumers to have access to water within their house/home/school, and
- Out of Home: the SDWEs providing a solution within a walkable distance from their house.

MULTIPLE BUSINESS MODELS OF SDWES

	At Home				Out of Home			
Business Model	Centralised Jug Delivery	Decentralised Jug Delivery	Household/ Community Filters	Mini-Grid	Rural Water Kiosk	Urban Water Kiosk	Tank Retail Kiosks	Metered Fountain in Retail Stores
								
Purification of water	Centralized	Decentralized	Decentralized	Decentralized	Decentralized	Decentralized	Centralized	Decentralized
Type of solution	Water in jugs	Water in jugs	Purification Equipment	Water in bulk	Water in bulk	Water in bulk	Water in bulk	Water in bulk
Reach	More than 60km from purification plant	Within 5km from purification plant	A household	A village or community	1,000 to 10,000 people	10,000 to 50,000 people	Customers of retail stores	Customers of retail store
Bacterial removal	✓	✓	✓	✓	✓	✓	✓	✓
Chemical removal	✓	✓	X	✓	✓	✓	✓	✓

At Home:

Centralised Jugs[2] Delivery (B2C)

- Large water purification or spring water sourcing and packaging plants
- Capacity to bottle 2000 jugs per day or more (40,000 liters)

[2] 20-liter containers in which water is sold

- Water is commercialised in jugs at retail stores and/or delivered directly to consumers at home reaching radius of about 30km from plant.

Decentralised Jugs Delivery (B2C)

- Small water purification or spring water sourcing, with varying treatment technology depending on initial level of pollution of water
- Capacity to bottle 200 jugs per day or more (4,000 liters)
- Decentralised networks of kiosks often under a franchise model
- Water is commercialised in jugs delivered directly to consumers at home within a limited radius of 5k from plant.

Household Filters (B2C)

- Water purification device for households
- Mainly focused on treating micro biological contamination
- The business model is based on a device/equipment model with upfront cost and "cartridge" replacement
- Household filters are often comprised of a simple core technology – the filter, and a container which can vary depending on the target consumer.

Community (Schools) Filtration Systems (B2B)

- Water purification device/systems for schools
- The client is either a school or government body
- The client acquires or uses the device/system through hybrid funding
- Maintenance is managed by the SDWE, and can be handed over to the school after a period of time.

Mini-Grid (B2C)

- Centralised water purification units for a village or a community
- Each unit is connected to a pipe network (mini-grid) that serves about 1,000 to 10,000 people

Out of Home:

Rural Water Kiosks (B2C)

- Small water purification units, located in rural areas, with varying treatment technology depending on initial pollution level of water
- Capacity to bottle 200 jugs per day or more (4,000 liters), serving 1,000 to 10,000 people.
- Water is commercialised without packaging to consumers who bring their own containers (water in bulk)

Urban Water Kiosks (B2C)

- Small water purification units, located in urban areas, with varying treatment technology depending on initial pollution level of water
- Capacity to bottle 200 jugs per day or more (4,000 liters), serving 1,000 to 10,000 people.
- Water is commercialised without packaging to consumers who bring their own containers (water in bulk)

Tank Retail Kiosks (B2C)

- Centralised water purification or spring water sourcing
- Water is transported by trucks to water tanks installed in retail stores, or in dedicated kiosks
- There is usually additional purification step at the retail store.
- Water is commercialised without packaging to consumers who bring their own containers (water in bulk)

Metered Fountains in Retail Stores (B2C)

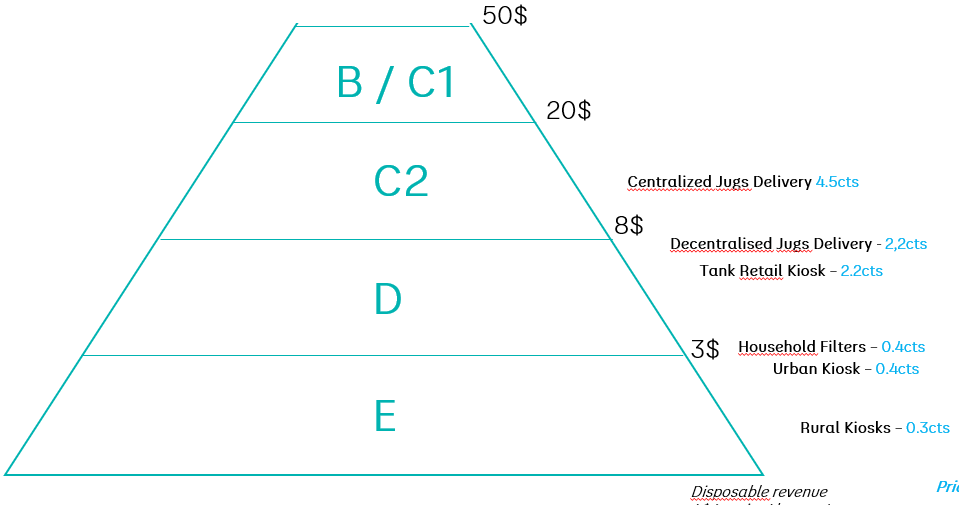
- Small water fountains with meter installed in existing/dedicated retail point of sale
- Capacity of purifying 500 litres per day
- Each fountain is connected to an urban pipe network
- Water is commercialised without packaging to consumers who bring their own containers (water in bulk)

5.4. ABILITY TO TARGET LOW-INCOME CONSUMERS

Safe Drinking Water Enterprises demonstrate a capacity to provide water at affordable price.

The different business models of Safe Drinking Water Enterprises have demonstrated a capacity to commercialise safe drinking water between a price range of 0.3cts to 5cts ($) per litre, (6 cts to 1$) per 20L jug). This shows that they can provide proper hydration within 3% of the disposable revenue of low-income consumers, which are those earning between 3$ and 8$ PPP per capita per day.

SDWES CAN PROVIDE WATER AT AFFORDABLE PRICE



Key assumptions :
1. Daily household water consumption = number of people per household x 1.8L /day
2. Price of water represent at most 3% of disposable household revenues

6. METHODOLOGY OF THE ANALYSIS

6.1. FINANCIAL MODEL

There are 3 ways to achieve economical sustainability for SDWEs:

1) **SDWEs are commercially viable**

Revenue from sales of water or equipment are covering operational expenses (Opex) and capital depreciation, generating a profit that represents more than 5-10% of the revenue (green colour code). A lower % would be a too fragile position to self finance the maintenance and Capex needed, on the other hand, higher double digit can be achieved with diversification of offer, integration of the value chain or PPPs.

2) **Hybrid 1 : SDWEs have their Capex subsidized**

Revenue from sales of water or equipment cover operational expenses but not capital depreciation/expenses (Capex). Subsidies[3] are needed to cover capital depreciation (purple colour code).

3) **Hybrid 2 : SDWEs have their Capex and part of their Opex subsidized**

Revenue from sales of water or equipment do not cover capital depreciation and do not cover fully operational expenses. Subsidies are needed to cover capital depreciation and part of operational expenses and (blue colour code).

6.2. ASSUMPTIONS

To be able to compare the different SDWEs, we have assumed certain parameters.

For those that receive grants to subsidize their Capex, we have reintegrated the depreciation of the Capex value in the P&L. For those that sell carbon credits and have part of their Opex subsidized, we have isolated the revenue from the sales of carbon credit and the other subsidies on Opex, to exclude them from the core profit and loss.

We simulated the impacts of the optimization of the key operational parameters (price of water, volume of water sold per kiosk, number of kiosks, number of filters sold, number of salespeople) (example: for rural kiosk the standard Capex considered is $5K to $15K for 5000liters per day. We pushed the volumes close to the max capacity and evaluated the financial impact).

We considered certain criteria (threshold for price of water at 3% disposable revenue, production capacity of the kiosk, management ratios). We took into account a ratio to increase the supporting and overhead costs in parallel of the previous parameters' maximisation.

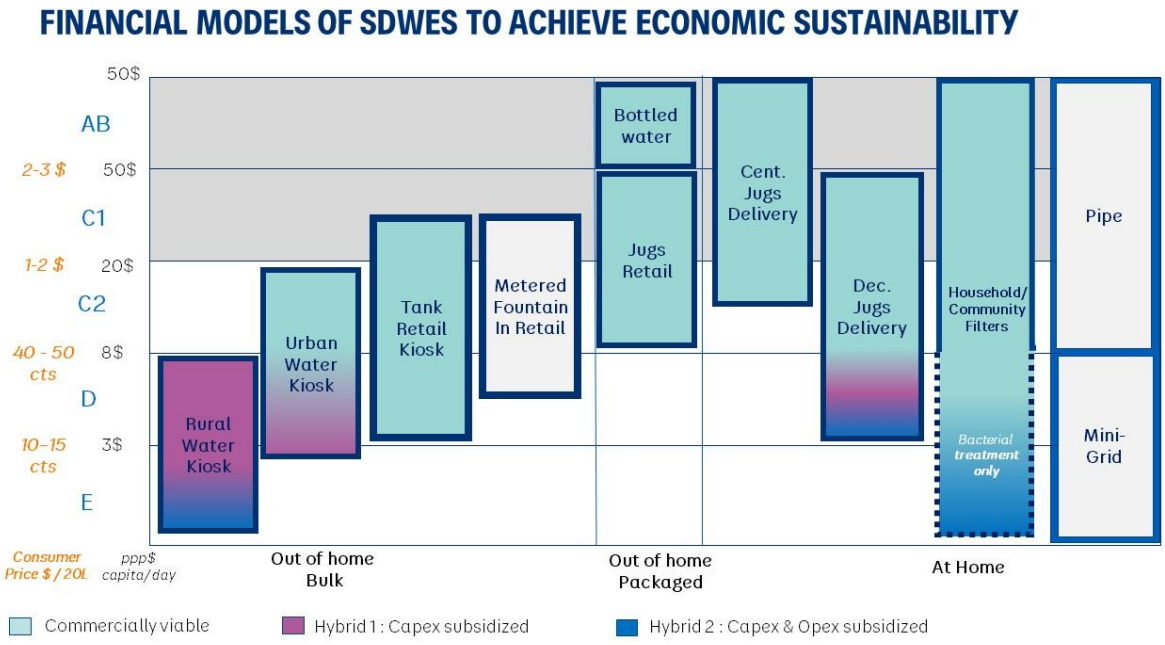
We then represented the different SDWE business models on a matrix. On the Y-axis we have included the SELs of different consumers, their daily per capita revenue, and the price at which a 20L jug would be affordable for consumers of the corresponding SELs.

[3] Subsidies may include revenue from sale of carbon credits, leveraging public-private partnerships to receive funding or to share expenses and donor grant funding.

7. FINDINGS

7.1. ASSESSMENT THE SDWE MODELS

We will now go into detail to see which SDWE model can reach which SELs, with which business and financial model.



Rural Water Kiosk Model

This model needs to leverage Hybrid Funding models to be economically sustainable.

The low revenue of the targeted consumers in rural areas (D or E SEL) and the low commercial potential per kiosk (small size of villages) make it difficult to be commercially fully viable. However, the revenue of water can cover Opex (Hybrid-1), if operations of kiosks are optimized and if installation of kiosks are densified (increased within a specific geographical zone) thus optimizing regional costs (costs of teams managing geographical zones) and reaching an optimal operation size. However, even when regional costs can be covered, it is quite challenging for these models to be able to cover the national overheads expenses needed to develop and manage the business. So most of these models are Hybrid 2, i.e. need subsidies for both Capex and and part or the Opex.

Their sustainability therefore also rely on their ability to raise philanthropic funds and/or leverage alternative funding models (CSR, carbon market, impact base funding). A key success factor is the capability of the SDWE to raise and manage this type of funds.

Some SDWEs (in India for instance) respond to public tenders by installing the kiosks and providing subsequent maintenance, leaving the operation of the kiosks to the local water committees. This allows the SDWE to reduce operating expenses, although their capacity to provide safe water, beyond the duration of the maintenance contract, is not always clearly proven.

Urban Water Kiosk Model

Thanks to the higher density of population and usually slightly higher revenues, this model has the potential to reach commercial full viability.

Sandro di Carlo Darsa – TIGRE

Urban location enables to leverage higher density around each kiosk, therefore higher volumes per kiosk enabling absorption of operating costs and Capex depreciation. Public Private Partnership, where utilities / public authorities finance part of the Capex for the installation of the Kiosk (and get reimbursed through part of the revenues generated), are a clear accelerator for those urban models.

In an urban context, the kiosks can also reach consumers of different SELs, especially from lower middle class, which allows sometimes higher pricing in specific kiosks serving this target group and benefits from a higher willingness to pay for safe water.

Tank Retail Kiosk Model

This model has proven to be commercially viable.

SDWEs of this model can target populations up to 20$ PPP daily income while still providing water at affordable prices for the 3$ to 5$ segment. They benefit from a production cost that is centralised and amortized by large sales volumes and a simplified purification system at the point of sale. When the water is sold in dedicated kiosks, a franchise model brings more agility (ability to install more kiosks at a faster pace) and enables to share the risks (as costs of kiosk installation is shared with the franchisee).

Metered Fountain in Retail Stores

We do not have enough data on this model to perform an analysis.

This is an emerging model, leveraging existing retail stores, their location & staff, and access to a source of water. In return, the store owner receives a share of the water revenue. When the purification system at the point of sale remains simple, the costs of these units are easily amortised given the existing footfall of the retail stores. However, these models can only address populations in the vicinity of the retail stores.

The model being so far urban, it targets low and middle SEL C1 & C2.

Other models

Bottled Water, Jugs in Retail and Centralised Jug Delivery are well established, commercially viable models targeting SELs A to Cwithin the 3% household revenue threshold.

De-Centralised Jugs Delivery

The model can be economically sustainable with a hybrid model.

Sandro di Carlo Darsa – TIGRE

It has the potential to reach the lower SELs with subsidies on Capex to reach SELs C2 & D in urban areas (Hybrid1), and with subsidies on both Capex and part of the Opex to reach SELs D& E in rural areas (Hydrid2).

Commercial viability can be obtained when selling water at a higher price, targeting higher SELs (C1 or C2), and is easier with a franchise model where the risk is shared with a franchisee covering part or all of the capital expenditure. The initial level of water contamination (influencing Capex) and level of technology integration are key parameters to improve profitability.

Household filters

This model has a strong potential for economic sustainability.

Sandro di Carlo Darsa – TIGRE

The best way for the filter suppliers to reach low-income (C2 & D) consumers is via direct sales, through a last-mile distribution system. However, this system requires a large salesforce which makes it challenging to be commercially viable (a certain scale is required). Therefore, these SDWEs are required to diversify the sales channels (like NGOs or B2B customers), and/or also target higher SELS with more premium products. Given its simple core technology, the filters can be adapted to a variety of containers, allowing them to address multiple consumers targets.

Leveraging influential or one-to-many[4] sales channels, such as schools or retail chains, can significantly increase their growth rate.

The biggest challenge for this model is the upfront cost to acquire the filter, which can represent up to 1/3 of the monthly income of the consumers of lower SELs. This can be addressed by providing them financing mechanism like prepayment or loan – either done in-house and/or by partners like micro-finance institutions.

Mini-Grid

We do not have enough data on this model to conclude the analysis.

There are several SDWEs managing village-scale grid systems that claim to provide safe drinking water and to be commercially viable.

We have identified several challenges:

- Decreasing non-revenue water[5]

[4] One salesperson sells to a customer that would buy more than one product
[5] Water that is treated but not sold due to leaks and unpaid bills

- Ensuring long-term reliable maintenance of infrastructure
- Ensuring water is safe for drinking at the point of use over time
- Balancing cost of infrastructure with the number of people served

7.2. METHODS TO INCREASE REVENUE

Increase demand

The first limit to the development of a SDWE is the **existence of demand** (i.e. are consumers aware that there is an issue with their current source of water, and are they ready to pay for a safer solution). We have also noticed the higher the SEL of the consumers, the more aware they are of the issue. When awareness is low, establishing a safe water solution requires a **significant investment in change of behaviour marketing (several Million euros)**. Some SDWEs have partnered with government or NGOs (sometimes a branch they set themselves) to raise funds and implement awareness and education programs, and therefore decreasing the marketing costs burden in their own P&L. It can be an opportunity for NGOs or PPP collaboration. In all cases, engaging efforts to increase consumer demand is crucial to increase volumes sold and reach optimal size to make the business viable.

Optimise pricing within the affordable range

It is possible to increase the price of water if it remains within the 3% of the disposable household revenue limit. However, water is often considered a public service, therefore its governance and pricing is sometimes more politically oriented and regulated than market oriented.

Diversify range of products and target of consumers

Given pricing constraints tied to affordability of water, diversifying range of products and/or target of consumers is are key opportunity to embrace to generate additional revenues streams that can be used to subsidize the core low-income targeted water business. This can be done in many ways including offering premium packaging, services or products, selling additional products at water kiosks (for example fortified porridge or gas). Moreover, these additional products increase footfall at the kiosks and can positively impact the sale of water.

7.3. FACTORS IMPROVING COSTS

Optimize infrastructure to reach full market potential

Equipment and systems are usually standardised, with the water production reaching often only about 30% of its full capacity, leading to expensive Capex when demand is not properly activated or the technical solution is not adapted to the potential market. Targeting the optimal potential consumer area vs capacity of the capex is therefore a key optimisation factor. The diversification of targets (B2B and low income per Capex point) can be an opportunity to increase volumes.

Densify operations to optimize operations costs

Economies of scale, ie increasing operations in a certain region, enables to better absorb fixed operations costs. When the density of operations is optimized, it allows for a more efficient use of regional resources: maintenance team, commercial teams, marketing, and other. Site selection for kiosk models, as well as chanel/geographical focus for filters are key to their efficiency.

Integrating the value chain

SDWEs that design their own purification technology (ceramic filters, resin filtration, reverse-osmosis, etc...) and manufacture the equipment in-house would benefit from reduced costs as opposed to those that rely on an external provider. Same benefit is given to SDWEs that integrate the production of jugs into their operations (at a large scale). The impact on the margin on operations margin can represent beyond +20pts improvement.

Opting for a franchise model

It enables the Capex intensive models to reduce their direct expenses and to share the risks with the franchisee. In many countries, it is key to have local partners like franchisees to access land and licences from legal perspective and negotiation capacities. Moreover, Capex investment for same kiosk can be reduced to a third when managed by a local partner. However, this model is intense in recruitment, training and control system.

7.4. OTHERS FACTORS AFFECTING GROWTH SPEED AND PROFITABILITY

Land acquisition strategy (for kiosk models only)

The scalability of kiosk models is highly dependent on how the **SDWE acquires land to installs kiosks**. If the SDWE works directly with villages and has to individually negotiate with each local authority, it is a very lengthy process. If the SDWE has a Public Private Partnership and installs kiosks on government land, or with the government's support to access retail points and schools, kiosks can be installed at higher speed and scale.

Partnership with public entities

Aside from facilitating access to land, leveraging a Public Private Partnership guarantees sizeable projects, mitigates private investors risk, by providing clear growth perspectives, and can enable the SDWE or the public authority to access concessionary funding to invest in more kiosks.

B2B Channels (for equipment models only)

SDWEs that commercialize equipment (i.e., water filters) benefit from targeting B2B channels such as NGOsor retail chains. This allows a single commercial contact to reach a larger consumer base. This gives the SDWE better negotiation opportunities and amortizes the operations' cost. A similar Public Private Partnership would also allow SDWEs to sell large quantities of their equipment and provide them to schools or communities.

Background of team & the entrepreneur

Many of the SDWEs are comprised of lean teams, headed by an entrepreneur. In the early stages, a choice is often made between building a team with the right profiles and skills that is cost intensive or working with a team that is more cost efficient. We noticed a clear difference in growth for businesses made up of teams with the needed structure and skill set compared to those that do not, even if it means often results in delaying the breakeven point.

7.5. OTHER CHALLENGES FOR SDWES

Lack of funding

This is true for all levels of early growth, incubation, very early stage (Zebra valley/Proof Of Concept finetuning) and early stage (pre-breakeven)

Recognition as a solution by utilities and funding structures

For further acceleration, more awareness/ legitimacy is needed for the SDWEs to be considered as an option by utilities, public water management bodies, bilateral and multilateral financial institutions.
The sector being at an early stage, only few players are aware of those alternative solutions, and there is no "Industry body, alliance" to promote them, except some smaller country level organisations: Safe Water Enterprise Alliance in India, or the Community of Practice with majority of their members operating in Ghana.

Only few exceptions of public utilities are open to complement their offer with SDWEs e.g. public utilities in Ethiopia proposing household filters to their clients, or Dhaka WASA in Bangladesh partnering with SDWE Drinkwell to reach last mile consumers.

8.CONCLUSION

SDWEs can be economically sustainable, either commercially (by covering all their capital expenditure and operational expenditure with transactional revenue) or with hybrid models. The funding model is ultimately dependant of the solution provided and the Social Economic Level that the SDWE aims to serve.

Regardless of the business model, SDWEs need to support their core business with marketing activation, efficient road-to-market strategy and skilled teams.

Their marked based, consumer centric approach is core to their sustainability, ensuring willingness to pay from their target and making them therefore sustainability oriented solutions per nature.

Danone Communities & the W2AF have been investing in Safe Drinking Water Enterprises, supporting their growth and consolidating their capabilities for impacting always more vulnerable people. We hope that this analysis will contribute to consolidate the sectors credibility, attract new investors and open opportunities for complementary approaches between public-private utilities and SDWEs.

All stakeholders awareness and engagement is needed to bridging the gap in the access to safe drinking water that affects over 2 billion people.

9. POST SCRIPTUM

As an investor in a large portfolio of solutions, Danone Communities has a unique perspective on that sector, to know more about the companies and ventures we invest in, follow us on the social media :

(14) Danone Communities: Overview | LinkedIn

10. GLOSSARY

B2C: Business to Consumer: refers to the process of selling products and services directly between a business and consumers who are the end-users of its products or services.

B2B: Business to Business: is a transaction or business conducted between one business and another, such as a wholesaler and retailer

Capex (Capital Expenditure) - Initial investment needed, for example = drilling, pumping, tanks, purification technology, building, packaging station,

Opex (Operational Expenditure) - The cost of commercialisation and maintenance (quality tests, equipment changes, repairs, ..) of the safe drinking water

Non-Revenue Water - water losses in the pipe system, non payment of invoices or pirating access

P&L Profit & Loss analysis

PPP: Purchasing Power Parity

RO Reverse Osmosis

Safe Drinking Water Enterprise (SDWE) - Mission-driven entrepreneurs, targeting low incomes consumers with a market-based and sales-driven approach providing potable water with an aim to reach economic sustainability, via decentralized solutions, to address different contexts and challenges.

Economic sustainability - capacity to reach EBIT breakeven

Purchase power parity (PPP) - A measurement used to compare the spending power between two or more countries.

SEL: Social Economic Level, ranked from ABCDE :
In developing countries, lower SEL can be linked to poverty thresholds (>3, 5 or 8 $PPP/day). SEL definition from Euromonitor for population data :
NB = marketing SEL can be determined in a more specific way by country

Euromonitor		France	Indo
	% of average revenue	(in €)	(IRpies)
A	> 200%	4 242	> 8 710 000
B	> 150 -200%	3 009	2 260 000-8 710 000
C	> 100 - 150%	2 130	1 555 000- 2 260 000
D	> 50 - 100%	1 394	1 010 000-1 555 000
E	< 50%		<1 010 000

To be able to have a cross-country analysis, we are simplifying the following equivalents: Actual threshold between categories might be slightly different per country :

Lower SEL and Revenu per capita ppp	
ABC1	> 20$ ppp
C2	< 20 $ ppp
D	< 8 $ ppp
E	< 3 $ ppp

Affordable: Water expenses shouldn't exceed 3% of daily budget per household (UN)
Example: Indonesia :

- HH daily consumption = 6.95L (3,86 people per HH x 1,8L per person per day)
- A BOP HH would earn 5,85$/day (8$PPP x2)
- If cost of water = 2cts / L :
- daily cost for water = 0,14$
- water expenses = 2,4% of daily HH budget