1001fontaines
Final Report on the Camp IV project

March 2020

Abstract

This document presents the results achieved by 1001fontaines under **the Camp IV project in Cambodia**. Structured around key assessment criteria (operational excellence, evidence of impact, cost effectiveness, sustainability, and pathway to scale), it highlights the **progress of Teuk Saat 1001**, our Cambodian partner organization, to become a **sustainable social business in the field of safe drinking water**, and the remaining challenges ahead.

Throughout Camp IV, Teuk Saat 1001 has been **expanding the water kiosk model**, a decentralized approach relying on entrepreneurship to provide underserved rural communities with a sustainable access to affordable safe drinking water. **The model's impact is now proven**, in terms of **health, economic development, environmental footprint and education.**

Thanks to its increased outreach, now covering 25% of rural Cambodia, and significant improvements in the organization's management, processes and tools, **Teuk Saat 1001 is now on the verge of reaching financial sustainability on the operations**. This milestone is an additional demonstration of the model's capacity to be a **viable and scalable solution to the safe water crisis**.

Far from being the end of the story, the Camp IV project has been an enabler **to position Teuk Saat 1001 for a large-scale growth,** and to become the **national provider of safe drinking water in rural Cambodia**. **The operational pathway for the coming years is clear** and shall be further supported by a **long-term vision** of the role Teuk Saat 1001 should play in the country**,** and a **tailored funding mechanism for this new phase**.

Index

Introduction

1001fontaines

Since its creation in 2004 in France as a non-profit organization, 1001fontaines has focused its efforts on enabling the creation of water kiosks, i.e. local social micro-enterprises that purify local sources of water and deliver safe drinking water to the surrounding vulnerable communities. With more than 700,000 people consuming safe water as a result of these innovative social enterprises, 1001fontaines has become one of the recognized leaders in the water kiosk sector.

Our solution offers a unique combination of three characteristics: (i) water quality at WHO standards provided up to the point of consumption; (ii) affordability for the most vulnerable populations thanks to a decentralized approach reducing the costs; and (iii) sustainability of the services through a market-based model supported by franchise.

Cambodia hosts our flagship program, which started in 2005, and has been managed by the local organization Teuk Saat 1001 since 2007. This is where 1001fontaines has been progressively demonstrating the capacity of the water kiosk to be a sustainable and scalable solution to provide safely managed drinking water services to vulnerable populations.

Camp IV Project

Phase IV or “Camp IV” (a reference to the final base camp of the Everest). was a game-changing project for 1001fontaines, having been conducted in Cambodia from January 2016 to December 2019.

The **objective of this project was to reach a critical scale for the entire network to self-sustain through water revenues**. This includes three levels of financial sustainability:

- Reaching kiosk break-even through water sales
- Reaching support platform break-even through assistance fees paid by local entrepreneurs
- Reaching local headquarter break-even through excess revenue from assistance fees.

More specifically, the Camp IV project aimed at 1) setting up 90 water kiosks in Cambodia in addition to the existing network, thus completing a network of 240 sites across the country; 2) adding one regional platform in Kampong Cham to ensure support to all the water kiosks, and 3) strengthening the local capacities to accompany the growth and support the entrepreneurs in raising their sales, thus reaching national sustainability on operating expenses.

Report structuration

This document acts as a stand-alone report for all the actions undertaken during the Camp IV project. It includes operational data and analyses from 1001fontaines, the external evaluation conducted in February and March 2020 by the consulting firm Sevea, and the outcome of a strategic support mission performed by Accenture on scale-up business plan.

The overall structure revolves around key assessment criteria (operational excellence, evidence of impact, cost-effectiveness, sustainability, and pathways to scale), in order to analyze the progress made (and the challenges still remaining) during the Camp IV project.

0. Executive summary

1001fontaines and Teuk Saat 1001 jointly conducted the Camp IV project from 2016 to 2019, aiming at establishing a sustainable network of water kiosks across the country. Building upon the experience acquired since 2004, **Camp IV was designed as the last phase enabling Teuk Saat 1001 to reach financial sustainability**, coupled with strong evidence of impact.

The 4-year project had the following objectives: 1) Establish 90 water kiosks to complete a network of 240 sites at national level, providing safe water to 720,000 consumers in the country 2) Set up a new regional platform in Kampong Cham to support the entrepreneurs, and bring it to financial viability 3) Strengthen the capacities of Teuk Saat 1001 and of the entrepreneurs to reach financial sustainability on the operations

This strategy did not vary all along Camp IV and has proven being the relevant one to achieve the fixed targets.

Operational excellence

Overall, **the Camp IV project targets have been met.** By end 2019, Teuk Saat 1001 counted 238 water kiosks in operation, serving 723,000 end-consumers in 19 out of 25 Cambodian provinces. 128 kiosks were set up in the past 4 years, and have reached a satisfying level of performance, with 74% of them being above breakeven at the end of Camp IV.

The implementation methodology has been improved, as well as the **franchise / entrepreneur support processes and tools**, thanks to significant efforts in social marketing, entrepreneurs' training, IT tools and franchise animation. This has resulted in a **strengthened organization**, able to provide a faster and better response to the entrepreneurs' needs, and a globally **improved level of sales performance of the water kiosks** (+31% in average in 4 years).

There are still **areas of optimization for the coming years**, to further finetune the model. This includes further integrating **digital** to gain productivity, mitigating the strong **turnover** of the advisors' staff, or exploring new ways to **animate the entrepreneurs' network** and boost their performance.

Evidence of impact

The last 4 years have brought further confirmation that **the 1001fontaines model is fully relevant in the context of rural Cambodia**, and will remain so, bringing a **valuable contribution to the UN Sustainable Development Goals**. The key areas of impact include (i) **health**, thanks to the provision of quality water till the point of use; (ii) **economy**, by offering an affordable access to an essential good for vulnerable populations, and by generating sustained livelihoods for the entrepreneurs; (iii) **environment**, with an optimized technology limiting CO2 emissions and a good management of plastic; and (iv) **education**, through the Water in School program.

This **multi-dimensional impact is well perceived by our consumers**, as proven by the increased adoption of our solution, with now 94% of O-we customers drinking only O-we (vs 32% in 2015).

Moving forward, 1001fontaines will focus on **demonstrating the resilience to climate change** of the model, and on **better measuring the baseline** in terms of users' water habits, to finetune our understanding of the avoided costs.

Cost effectiveness

At the consumers' level, **O-we remains the most affordable solution for safe drinking water**, the alternatives not being able to guarantee quality or costing more. We also ensure that our consumers do not spend more than 3% of their budget on drinking water, following the WHO recommendations. At the program level, **the level of investment per beneficiary appears reasonable, being 7 to 10 times more effective than piped supply** and amounting to approximately $20 per capita.

To improve cost effectiveness, the most efficient lever will be to **act on the penetration rate**, in order to achieve a higher number of beneficiaries per water kiosk. This might require an **innovative approach**

to review the kiosk's design and build a modular model, adapting to the size of the commune (e.g. a bigger, more automated kiosk for larger communes). This "**kiosk 2.0"** could require a higher amount of investment but would still generate a **better cost-effectiveness** in terms of number beneficiaries per dollar invested.

Sustainability

The key objective of the Camp IV project was to bring Teuk Saat 1001 to sustainability, from a financial and managerial standpoint.

Financially, the sustainability should be evaluated at the network of water kiosks' level, and at Teuk Saat 1001's level, i.e. the franchise itself. **The water kiosks have overall generated a net income of** $113,462 in 2019, and 82% of the sites established since 2005 were still in operation end 2019. The financial projections for 2020 anticipate that **the franchise will start generating profits, and that the combined commercial activities** (franchise, consumables supply, water quality) **will have a positive P&L of $41K.**

Combined with the **strengthened management team** (Executive Committee of 7 members, 77 staff, local Board in place and engaged), **the sustainability milestone can be considered as achieved**.

For Teuk Saat 1001 to remain sustainable while pursuing its growth, further efforts are required to **strengthen the structure** and especially the operations management. 1001fontaines shall also remain **vigilant on the funding strategy of the Water in School program**, which does not hamper the sustainability of the model but might require significant fundraising efforts.

Pathway to scale

The achieved sustainability on the operations as well as the evidence of impact comfort us in our decision to continue our growth in Cambodia. **The operational trajectory is clear, with a 5-year plan defined**. It ambitions **to position Teuk Saat 1001 as the national provider of safe drinking water in rural Cambodia**, with a target of 1.5M end-consumers and a network of 430 water kiosks in operation.

However**, the Cambodian rural context is evolving**, and will require Teuk Saat 1001 to **further secure its license-to-operate through stronger ties-up with the government**, who now aims at structuring the bottled water sector. This means **clarifying the role we want Teuk Saat 1001 to play in Cambodia**: the prime partner of the government to provide water in rural communities, or a leading private water business with a strong social purpose.

The funding mechanism for scale is also bound to evolve, to be tailored to the current financial situation of Teuk Saat 1001. With anticipated profits of USD 6M for the coming 10 years, it seems feasible to **introduce non-philanthropic funds** to support the required investment. The mechanism is yet to be defined (a mission has started with the support of Accenture consultants), and 1001fontaines is keen to receive external contributions from its strategic partners on this matter.

Conclusions

1001fontaines and Teuk Saat 1001 have reached the Camp IV targets thanks to the quality of its project's execution, bringing us the **excellent grade of 17/20 on the external evaluation**. The key milestone of financial sustainability on the operations is achieved and shall be further strengthened in the coming years. **The Teuk Saat 1001's pathway to scale is well defined from an operational perspective** and will be **finetuned in the coming months in terms of long-term vision and funding mechanism.**

We would like to thank our partners for their contribution to the Camp IV project.

We are eager to continue engaging them as strategic contributors to support the further growth of 1001fontaines and Teuk Saat 1001.

1. Operational excellence

1. The Camp IV has delivered its operational targets

The table below summarizes the targets and how 1001fontaines has been able to reach them.

Objective	Achievement targets	% Achieved	Delta analysis
National Scale			
240 kiosks by the end of 2019	238	97.5%	4 of these 238 sites are active but they are not operated in an entrepreneurial mindset as they are social kiosks.
720,000 beneficiaries	723,000	100%	61% of the beneficiaries are clients of the stations. The other 39% are children beneficiaries of the water in school program.
2/3 of Cambodia territory coverage	Yes	100%	Kiosks are located in 19/25 of Cambodia's provinces, the northern-eastern provinces being too far away from a platform to be a target for now
All of the 3 platforms manage to provide technical and financial support to 60 to 90 kiosks.	Yes	100%	After the set-up of Kampong Cham platform, kiosks were re-allocated to the 3 platforms resulting in a harmonious distribution
TS1001 financially self-sufficient at the end of the project	The net income in 2019 is -5% of the total revenues	The deficit went from -22% of the budget in 2017 to –5% of the budget in 2019	TS1001's operations are not self-sufficient in 2019 but will be in 2020. Nevertheless, TS1001's growth will still rely on external funding for now (mostly site expansion).
Projects			
90 more kiosks were opened	128	100%	From 2016 to 2019, 128 kiosks were opened: 119/121 supposed to be launched between 2016 and 2019 + 9 that were supposed to be launched in 2015 – Among those, 90 were part of the Camp IV project.
135,000 new beneficiaries in Kampong Cham province	152,000	113%	63% of the beneficiaries are clients of the stations. The other 37% are children beneficiaries of the water in school program.
75% of new kiosks are self-sufficient after 12 months	64%	85%	64% the new kiosks launched after 2016 were Tier 1 or Tier 2 one year after the launching.
Kampong Cham platform is efficient 18 months after the project was launched	Yes	100%	Kampong Cham platform is efficient. The platform had the highest sales volumes and 85% kiosks are sustainable in 2019.

Source: Sevea report, 2020

From January 2016 to December 2019, **128 sites were opened** by 1001fontaines and Teuk Saat 1001 (31 in 2017, 37 in 2018 and 35 in 2019), far above the target of 90.

Besides, **these sites have reached quite a good economic situation**, with 74% of them being above breakeven (average volume of sales above 1,200L per day), and one third being in capacity to fully self-finance their reinvestments (above 1,700L per day).

In their report, Sevea confirmed the overall performance improvement achieved during Camp IV:
"*In 2013, only 8 of the 38 kiosks that were launched during the phase 3 of TS1001 development (since 2012) produced more than 1,200 litres per day, which represents 21% of these kiosks. In comparison in 2017, already 54% of the kiosks that had been created since 2016 produced more than 1,200 litres per day. As a result, the kiosks launched during Camp IV reached more rapidly sales volumes above 1,200 litres per day – the limit of production considered to allow kiosks' self-sufficiency*."

A **third regional platform in the city of Kampong Cham was inaugurated in 2017**. The platform hosts its own water quality laboratory as well as a warehouse to supply of consumables to the nearby entrepreneurs. Entrepreneur support teams (advisors[1], lab officers, technicians, and accountants) were recruited in the platform. It is now the **top performing platform in the portfolio**, with the highest level of sales volumes. As Sevea stated, "*Kampong Cham platform managed to increase the sales volumes of the kiosks by 47% on average (compared to 6% on a national scale), with Tier 3 kiosks increasing theirs by 13%, [which] highlights the efficiency of the support provided by the advisors and the platform in Kampong Cham.*" With a net income of +$43,000 in 2019, **the financial viability of the platform's operations has also been achieved** during Camp IV.

With 234 sites in activity spread across 19 of the 25 Cambodian provinces, **Teuk Saat 1001 has increased its national coverage**. Despite the full implementation of the kiosk openings, the target of 240 sites was not exactly reached, due to the closing of older sites. Some of them will be reopened in the coming months, and new kiosks will start as well, bringing Teuk Saat 1001 well beyond the 240-site threshold in 2020 (objective at 264 sites at the end of the year). The non-achievement of this target thus does not raise any specific worrying point from our side.

2. The operational excellency of the model has strongly progressed during Camp IV …

In parallel to opening new water kiosks, Teuk Saat acts as a franchising organization to provide services to entrepreneurs: quality control, technical maintenance, training / academy, sales & marketing, coaching … During Camp IV, key capacity-building projects have been conducted to improve the value of the franchise.

- Identify and roll-out the **best practices of top-performing entrepreneurs**:
- Redesign the **Social Entrepreneur training Academy**
- Reinforce the "O-We" brand through a **new social marketing policy**
- Build a **"O-We family" franchisees network**
- **Standardize the site launching methodology**

"Serious Game" tablet training on best practices

Promotional leaflet during Water Festival

[1] Advisors are field staff whose role is to coach and help the entrepreneurs to be as successful as possible on their local markets

Besides, with the technical support of Google, we have launched several **digital tools to improve our operational efficiency**: IT tools for business reporting and consolidation, water quality follow-up, or technical intervention management. As an example, all advisors are now using this single tablet-based mobile application, thus improving data reliability and structuring the dialogue with entrepreneurs: in consequence, the monthly P&L of our sites are now edited within 13 days (vs 35 to 45 days before), advisors spend at least twice as much time in the field to coach entrepreneurs, purchase order is done directly by the entrepreneur to the support platform, all cash transactions are now secured, full transparency on financial flows has been reached. As such, Teuk Saat now operates under the standards of some of the most efficient social enterprises of the market.

Those projects have **directly contributed to the strong progress of the network performance since the beginning of the program**: + 31% average volume per kiosk (1.350 > 1.772 liters per day), -33 pts Tier 3 sites in the portfolio (44% > 10%), +2.3 pts increase in penetration (14,8% > 17,2%).

An important capitalization work has been conducted to formalize these assets and key learnings.

See appendix 1 for a detailed presentation of those capacity-building projects

3. … yet there are still areas for optimization to enhance operational excellency

Several areas of **operational improvements** have been highlighted by the Sevea report.

The first one relates to the **technical assistance** of entrepreneurs: *"if TS1001's responsiveness has increased, there are some bottlenecks in the management of the maintenance: the technical manager in charge of both regional technicians and project technicians (i.e. staff who build the new kiosks) struggles to efficiently supervise his teams due to work over-load. Moreover, there is no medium through which entrepreneurs can evaluate the quality of TS1001's response in case of intervention. Finally, TS1001's maintenance process does not include preventive or corrective maintenance, which will come to be a problem considering the ageing of kiosks".*

The second one is to manage the **high level of turnover of the advisors** (50% over the last 18 months). Even though this has not impacted the opening of new sites so far, this is a clear risk in the mid-term. The key reason behind this turnover lies in the difficulty of the job: advisors, who are junior staff members are in the front line when it comes to managing daily issues.

There is also a strong **room for improvement in the franchise animation**, among other through social media. Mobile ownership and usage in Cambodia have grown dramatically (+28% Facebook users in 1.5 years). Sevea suggests several ideas, such as creating an online group to ease communication with entrepreneurs, create Facebook groups to connects entrepreneurs to their local customer base, setting up an online mentor-mentee program …

Another important aspect is the need for Teuk Saat 1001 to **review its raw water source selection process**, by being more attentive to parameters that generate problems for the sites to sell water, such as the presence of mineral white flakes that are safe to drink but create mistrust in the water quality from the consumers.

Finally, we believe that there is scope to **further leverage digital in our operations**. A benchmark has been conducted with the support of Accenture, and the following key ideas have been identified: remote monitoring of water quality (to anticipate a stronger regulation on the bottled water market), optimization of home-delivery routes, digital tools for entrepreneur's continuous training, digital payment between consumers and entrepreneurs or data collection on consumers to optimize follow-up.

2. Evidence of impact

a. The 1001fontaines model has proved its long-term relevance in the context of rural Cambodia

1001fontaines has been deploying the water kiosk model since 2004 and has evidence of consumers' receptiveness and willingness to pay for safe water and the home-delivery service. One of the key figures supporting this assertion is the **survival rate of sites**: of all the water kiosks launched since 2005, 82% were still in operations at the end of 2019. This rate rose to 90% for the sites launched after 2012, as a result of continual improvement. The 150+ million liters of our water sold every year are further evidence of customers' positive response.

More specifically, in Cambodia, with 30% of the rural populations still relying on unimproved water and surface water, and **84% lacking access to safely managed drinking water services**, there is still a **significant need to provide quality water at the point of consumption**.

As stated by Sevea, "***piped water systems are the most likely option to provide a safely managed drinking water service but they are not yet capable of doing this, and won't be in the next 5 to 10 years*** *due to problems with insufficient chlorination, old/unprotected networks, lack of knowledge of operators, no plumbing inside the home and improper storage, handling and usage by the consumers. The other water supply options that currently exist in rural Cambodia, wells and rainwater harvesting systems, also cannot guarantee safe water at the point of consumption. Moreover, private bottled water kiosks fail to serve quality water (and do not always provide a home delivery system),* ***therefore TS1001 is the only actor to offer a necessary service to complement the other supply systems to ensure the delivery of both quality and quantity of water***."

We thus remain confident in the water kiosk's capacity to remain the most relevant solution to provide quality drinking water in underserved areas, and to sustain even if other solutions arrive later.

b. The adoption of the solution by the beneficiaries has progressed

The beneficiaries are the 723,000 people consuming safe water across Cambodia at the end of December 2019. In 2019, Teuk Saat 1001 undertook a customer survey to get additional insights on their habits and standards of living.

Customer survey results of both O-we and non-O-we customers 2015 & 2019, Sevea 2020[2]

Statistic	2015*	2019**
% of customers drinking only O-we	32%	94%
Average HH size of O-we customers	5 people	3.5 people
Monthly average income of people surveyed	$187	$244
Monthly income of O-we customer	$345	$270
Reasons for choosing O-we	1. Convenience 2. Health 3. Price	1. Price 2. Convenience 3. Good taste

The fact that now 94% of O-We customers only drink O-We (vs 32% in 2015) is a sign that the brand value has strongly increased.

Sevea analyzed the evolution between 2015 and 2019: "*Almost all O-we consumers are now drinking bottled water all year round, whereas in 2015,* ***they were switching back to rainwater during the wet season****. The decrease in the monthly income of an O-we customer as well as the decrease in the difference between this and the average income shows that it has* ***become more accessible to lower income houses****. What also adheres to this is the fact that* ***the price is now being voted for as the number one reason to choose O-we****, whereas before it was ranked just third".*

[2] 2015 – sample size 145 of a mix of O-we and non O-we customers. 2019 – sample size 500 people (250 non O-we customers, 250 O-we customers)

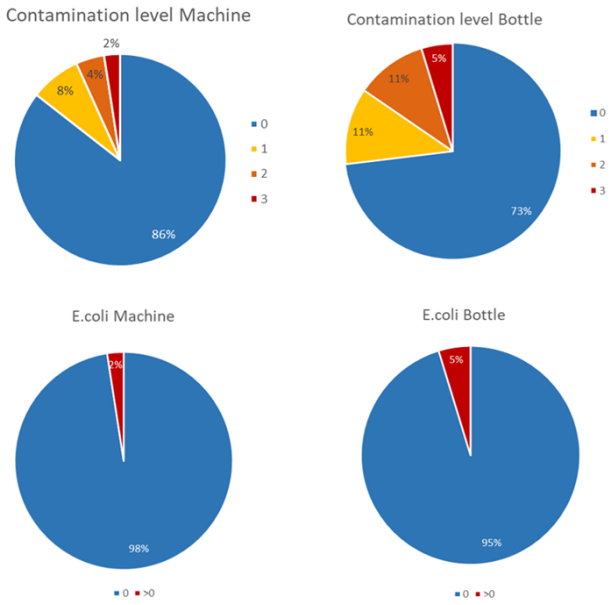
c. A demonstrated impact on health through consistent water quality results

Improving health is the purpose of 1001fontaines, the reason why it was created back in 2004. Consequently, we engaged in a scientific study to demonstrate our impact on the target beneficiaries in Cambodia in 2012[3]. The results showed a clear **reduction in the risk of occurrence of diarrheal diseases** for children below 5 years old – one of the most vulnerable populations to waterborne diseases. The decrease ranged between 30% and 60% depending on the initial water source (surface water, ground water…).

The health impact of 1001fontaines thus lies in our capacity to ensure quality till the point of use, which are the premises of the communities we serve.

Clear procedures are in place to measure and manage water quality, such as the monthly control of each of our 240 stations.

To assess the quality, Teuk Saat 1001 uses three levels of contamination: Level 1 when coliforms are above 10, Level 2 when coliforms are above 100 CFU, and Level 3 when E.coli is above 0. The levels 1 and 2 correspond to a water that is drinkable but highlight a future risk of higher contamination due to bad management of equipment. The level 3 means that water is unsafe for drinking purposes, and as such requires immediate actions.



Water Quality statistics from 2019, Sevea, based on data retrieved from the Water Quality App

As analyzed by Sevea, "*water quality data from 2019 have revealed good levels of water quality in terms of bacteriological contamination, with only 5% of level 3 (i.e. E.coli contamination) for bottle samples, and 2% of level 3 for machine samples. Overall, there is 73% of compliance for bottle samples and 86% of compliance for machine samples.* ***As a comparison, other private bottled water suppliers have a compliance rate close to 0%*** *(based on preliminary results of a pilot analysis of the bottled water sector in Kampong Chhnang).*"

d. An affordable solution for end-users

The social purpose of 1001fontaines is to reach out to vulnerable populations, living in underserved areas in terms of access to water. The question of affordability has thus always guided our pricing policy. According to the WHO, expenses related to water should not exceed 3% of the household monthly budget. We have always taken the poverty line as a reference, which in Cambodia, amounts to $1 per day and per person, hence an average budget of $150 for a 5-person household. With the current jug pricing at 1,800 Cambodian riels for 20 liters, and an average of 1 jug purchased every 3 days, the affordability ratio is sharp at 3%. However, as highlighted by Sevea, "*given that the monthly household income of O-we customers is around $270/month, drinking O-we water represents less than 2% of their budget. Thus****, the affordability of O-we water is not a problem, and indeed the customer survey 2019 reveals that the first reason for customers to choose O-we is its affordable price***."

[3] http://www.biomedcentral.com/1471-2458/13/1145

Overall, the O-we customers expressed a satisfaction when it comes to affordability, with Sevea mentioning that "*all our focus groups have highlighted that O-we water saves them money compared to (i) the purchase of other types of water (ii) the purchase of coal to boil rainwater, or water filters (iii) the costs induced by water-related health issues*."

In addition, we have done a preliminary assessment of the costs avoided by our solution:

- As most people boil water when they don't purchase O-we, we looked at the expenses incurred by boiling 20 liters of water. We found out that 4 to 5 kilograms of charcoal are required, each of them costing 1,500 riels. Hence, compared to a 1,800-riel jug, boiling water is approx. 4 times more expensive.
- We expect improved health to lower the medical costs related to waterborne diseases. One consultation to a health center amounts to at least 3,000 riels, not including medicines, or loss of incomes due to staying at home to heal or take care of sick children.

Having a clearer baseline of water-related habits would help us finetune this analysis, and thus strengthen our messages when promoting our product.

e. A low environmental footprint

1001fontaines has **designed an environment-friendly solution**, be it from the optimized choice of technology, the solar power, or the deposit system for the jugs to reduce the plastic consumption. This green model replaces a highly polluting initial situation, with people boiling water at home, often with inefficient cookstoves.

A key evidence of this approach is the **certification by the United Nations Framework Convention for Climate Change (UNFCCC)** obtained in November 2016 that our Cambodian project actually avoids CO2 emissions, and as such, is eligible to **emit carbon credits**. For the year 2019, we expect approx. 17,000 credits, corresponding to as many tons of CO2 avoided.

Sevea has identified an improvement point in the management of bottles to reduce the plastic footprint: "*The number of broken bottles is non-negligible: 30+ broken jugs per month for 3 out of 5 interviewed operators (supposedly due to bad consumer behavior). If that is the case in most stations, then the amount of plastic waste created by a high number of broken bottles hinders the desired circular management of bottles […]. Ideas include collecting all the broken bottles and reselling them to plastic recyclers, integrating part of the recycling chain within TS1001 (for instance, the cleaning and preparation of PET for recycling), and offering a plastic waste collection service to the communities beyond the broken bottles.*

Besides we feel a need **to assess and demonstrate the resilience of our model to climate change**. We are convinced the decentralized feature is an enabler for resilience to climate change, for we can design local solutions depending on the situation (risk of drought or flood, change of technology if evolution of contaminants), and the very limited quantity of water resource required for our model (only drinking purposes) makes it more resistant to potential fluctuation of rain patterns. This being said, we are looking for a more evidence-based demonstration and have thus engaged with other safe water enterprises' projects in a joint study led by the consulting firm Dalberg on "Assessing the resilience of SWEs to climate change". The results are expected for mid-2020.

f. Livelihoods: a positive impact for the entrepreneurs but a need to raise their income

If the end-consumers of our water are the beneficiaries of the model, we also consider the entrepreneur as a target group supposed to gain benefits from participating to our actions.

We see today that we have been able to generate approx. **750 jobs directly** in the communities where we work, for 3 people work in average in a water kiosk. The sustainability of the kiosks is also well ensured, with 86% of them being above breakeven (1,200L avg/day), and we are confident in our ability to bring all of them to this point and beyond. This means that **the generated livelihoods are long-lasting**, and that entrepreneurs can confidently consider them as their main source of revenues.

If we don't face a huge challenge today in terms of entrepreneurs' recruitment and retention, **we anticipate higher difficulties if we do not manage to improve the incomes at entrepreneur's level.** Sevea states that ***"while the average wage is increasing in Cambodia, entrepreneurs don't manage to raise their wages****, on the one hand because they don't manage to increase sales, and on the other hand because they are afraid to raise prices due to the competition (some competitors can now offer prices as low if not lower than O-we water, and some also do home delivery). As a matter of fact, the 2019 customer survey reveals that the average monthly income of O-we customers amounted to 270$/month, while the average monthly income of entrepreneurs is between 150$ and 200$/month. As a comparison the minimum salary of industry workers is around 185$.* ***Overall, low wages and hard work risk diminishing the attractivity of the status of entrepreneurs, making recruitment harder****. Following TS1001's advice, some entrepreneurs have already started raising the price of water in order to be able to increase their wage, but most are afraid to so. TS1001 could therefore introduce better support for entrepreneurs to increase the price as well as further efforts of coaching to grow the sales".*

g. The M&E framework has been improved but remains perfectible

While monitoring the performance of the water kiosks has always been at the heart of the 1001fontaines approach, thus aligned with the social business mindset, it appeared that our follow-up of wider socio-economic benefits of our model could be improved. That is why we requested support from the USAID DIV Venture Assistance Program, in order to upgrade our M&E framework. The consulting firm Sevea was appointed for this mission. Three strategic impact clusters were identified, and correlated with the SDGs:

- Improving the **health** of 700,000 regular end-consumers by providing them with safe drinking water (SDG 3, SDG 6), an impact demonstrated through scientific studies in Cambodia in 2012. To improve our M&E, we will focus on gathering more data on initial water consumption habits, potential barriers to shift to bottled drinking water, and the behavior change generated by our presence.
- Generating **economic development** thanks to a network of 240 water kiosks in operation, creating 750 sustainable jobs in the field (SDG 8) and providing the entrepreneurs with key professional skills (SDG 4), while delivering a basic service at an affordable price for poor people (SDG 1). To improve our M&E, we will work to assess the costs avoided for our end-consumers (e.g. purchasing charcoal to boil surface water), thus going beyond affordability of the product in our sales speech.
- Creating a **positive environmental impact** by optimizing the plastic consumption and the treatment system's energy and water efficiency (SDG 12), avoiding approx. 17K tCO2 emissions per year thanks to a low carbon process replacing the traditional habit to boil raw surface water with inefficient cookstoves (SDG 7), and increasing the resilience of communities to climate change (SDG 13) thanks to its decentralized features. Our Environmental impact has already been proven thanks to the carbon credits certification. We would now like to get a more comprehensive footprint, and analyze the resilience to climate change of our solution.

In addition, the Water in School program creates a positive impact on the **educational experience of children** (SDG 4), thanks to lower absenteeism and better hydration improving cognitive capacities. We also consider having an impact on **gender equality** (SDG 5), by providing economic opportunities to women (25% of the water kiosks staff are women) and by freeing them from the drudgery of fetching and boiling water at home.

We have started building an "Entrepreneur database" to better analyze the entrepreneurs' profile, and the actual increase in their quality of life. The remaining points are yet to be integrated, which will be a progressive process in the two coming years.

3. Cost-effectiveness

a. A competitive and cost-effective solution for the target beneficiaries

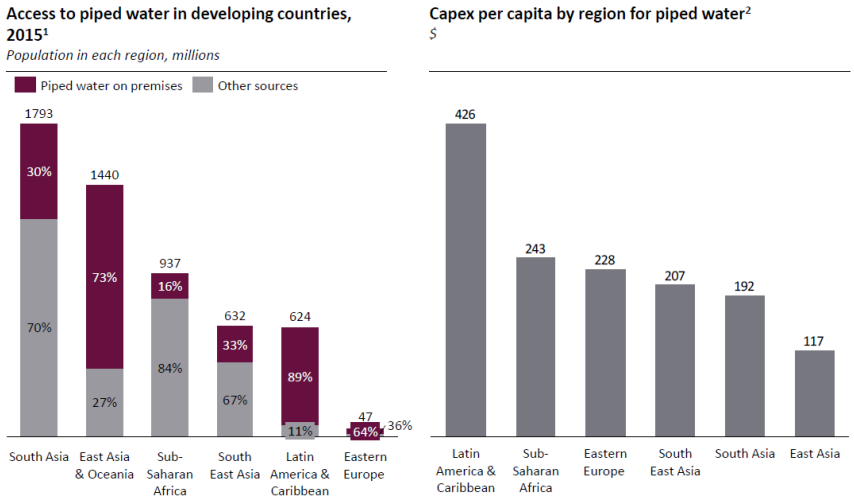
Among our current consumers, **O-we represents closer to 2% of their budget, below the threshold of 3% which is considered as the reference for affordable when it comes to water.** In addition, our bottled water often comes as an **alternative to boiling water**, which is more expensive because of the required charcoal than buying a 20L jug of safe water.

b. The 1001fontaines solution is 7 to 10 times more cost-effective than piped water

This affordability can be maintained because we do not ask the consumers to pay for the initial investment, which is entirely subsidized. One water kiosk cost USD 33,000, and generates in average 1,800 beneficiaries to date, hence a **required investment of $18.5 per capita to create an additional beneficiary**, which falls to $3.3 if we consider the whole catchment area potentially covered by a water kiosk.

This level is consistent with another analysis: If one considers the total amount that has been spent by 1001fontaines in Cambodia since the beginning of the initiative in 2005 (around USD 14.5 M) and the actual beneficiaries (720,000), the cost per beneficiary amounts to $ 20. If we exclude the Water in School Program, this level amounts to $ 28.

This can be compared with the required investment to deploy piped water supply: in South East Asia, the cost per capita is around $ 200. As such, **the kiosk is 7 to 10 times more cost-effective than piped supply.**



Source: Dalberg, The Untapped Potential of Safe Water Enterprises, 2017, http://safewater.enterprises

One could object that piped supply provides a larger quantity of water, and as such addresses additional needs. However, we operate in areas where the availability of water is mostly not an issue (except for the temporary droughts that might hit some of the Cambodian provinces during the hot seasons), and where water fetching is not a drudgery. We thus consider that the water kiosk's capacity to provide the required 1.5L per day and per person for the drinking needs on the long term is the most relevant intervention, with the best investment / benefit ratio.

c. Improving the penetration rate would significantly increase the cost-effectiveness of the solution

The initial investment for a water kiosk (USD 33,000) being well established by now, with limited margin to optimize it further, the **biggest lever on the cost-effectiveness is to generate more consumers with a similar investment**, and thus to **increase the penetration rate**. It has so far remained below our targets, ending at 17.2% end 2019 versus an objective of 22%, and 25% for 2020.
While having an average of 1,800 end-consumers per kiosk corresponds to an investment of $18.5 per capita, growing to 2,500 would bring the cost-effectiveness to $13.2 per capita.

To achieve that, the first step is to **further enforce the good practices**, starting with the number of operators and of deliveries per day. This falls under the advisors' responsibility. We will look at freeing additional time for coaching from the advisor, either by reducing the number of sites followed, or by digitalizing the monitoring process at entrepreneur's level, to diminish the advisors' time allocated to data collection. This should mechanically enable us to **achieve a Tier 1 rate close to 80%.**

However, we observe that **many sites with a large market potential** do apply all the good practices and reach a correct level of performance in terms of sales volume **but underperform in terms of penetration rate**. Indeed, the average penetration of communes with less than 10,000 inhabitants (in average 7.188) is 25%, whereas communes with more than 10,000 inhabitants (in average 14.299) have a penetration rate of 13%.

An objective difficulty for these sites is undoubtedly that the extension of this hold requires for them to invest, on the one hand in additional personnel, but also in an additional delivery tool (Koyun type or motor-cart), which they might not dare.

Addressing this challenge shall require a **more disruptive approach, reviewing the kiosk design and its modus operandi**. Ideas to explore include automating the production to make higher volumes easy to absorb for the entrepreneurs and the teams, developing delivery capacities for longer distance, or creating a network of authorized resellers in villages too far for regular home delivery.

As such, one could imagine that **two water kiosks models would coexist, one for the smaller communes (same as today) and one for the larger**. Though the initial investment would be higher for this second kiosk than for the current model, it shall result in a **significantly improved cost effectiveness in terms of generated consumer per dollar invested**.

Breakdown of village census in one of our sites (named H32)

In the H32 example, the production site is located between Chet Otdam and Preaek Ta Kaev villages. Therefore, the entrepreneur's efforts are focused on serving the population of these two villages, and miss the opportunity to cover the other villages of the district.

4. Sustainability

The sustainability of the 1001fontaines project in Cambodia requires to achieve:

- The financial sustainability of the two levels of the initiative:
  - The entrepreneurs on one hand
  - And the support structure (Teuk Saat 1001) on the other hand
- The managerial autonomy of the local team:
  - Staff
  - Governance

a. A financially sustainable network of entrepreneurs

Our target is that the revenues generated by the water sales be large enough to cover all the stations operating costs and to enable the entrepreneur to make a decent and attractive living from this activity. Sustainability can then be assessed through three key indicators.

The first one (and on the most obvious) is the is the fact the stations continue their operations over time. 234 stations (out of 284 launched) were still in operation on December 31st, 2019, representing a **82 % survival rate**.

A second indicator of financial sustainability may be the **ability of each station to show a financial profit over a 12 months' period**.

As shown in the KPI table (hereafter), in 2019, globally the **Tier 1 and Tier 2 sites have generated a positive Net Income** (respectively $ 103,733 and $ 12,074) after having covered all their costs (operating costs, maintenance and reinvestment costs), while **the Tier 3 group almost achieved its break-even** (reporting a consolidated loss of $ 381).

	Geography	BTB	PNP	KC	Total	2018	2017	2016	2015	2014
Total sales ($) (Water + Jugs)	Tier 1	378 599	457 873	609 374	1 445 846	1 076 007	680 454	736 020	635 366	259 125
	Tier 2	319 445	198 520	242 695	760 661	537 618	521 761	421 672	333 352	201 615
	Tier 3	45 227	14 102	66 013	125 341	169 097	315 547	193 574	181 944	218 639
	Others	0	13 922	15 241	29 163	39 368	15 269	21 628	10 705	22 028
	New	23 569	68 033	54 445	146 048	117 295	50 188	129 840	19 783	161 815
	Total	**766 840**	**752 449**	**987 769**	**2 507 059**	**1 939 385**	**1 583 220**	**1 502 735**	**1 181 151**	**863 222**
Sites Net Income ($)	Tier 1	14 311	29 808	59 614	103 733	62 206	38 456	36 594	39 011	
	Tier 2	5 178	333	6 563	12 074	14 417	2 394	10 337	13 209	
	Tier 3	-1 916	-191	1 727	-381	-3 538	-16 845	-12 126	-9 870	
	Others	0	-2 912	847	-2 064	-4 844	-744	-1 009	-5 550	
	Total	**17 573**	**27 038**	**68 751**	**113 362**	**68 241**	**23 261**	**33 795**	**36 800**	**0**

Tier 1 and 2 still represent 181 sites (out of 210 having more than 1 year of existence) which would then suggest a sustainability ratio of **86** %.

Finally, a more sophisticated indicator might be the **entrepreneur's personal income** resulting of the addition of his monthly salary plus the station annual Net Income. Our assumption is that being an entrepreneur (which is the basis for ensuring the operations sustainability) becomes attractive if this activity enables him/her to generate a personal income of at least $ 150 per month.

Based on this definition, in 2017, 43 % of our entrepreneurs were deemed to make at least this amount of money and 59 % in 2018. In 2019, this percentage progressed to 64 %.

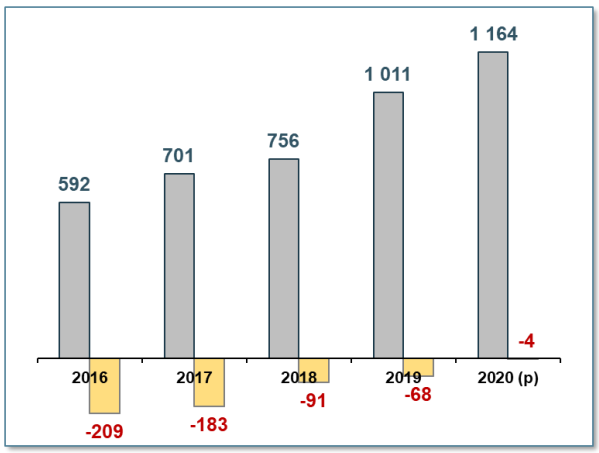
However, this criterion is challengeable because the entrepreneur's personal income may also not correctly illustrate his/her actual family income, since many of these entrepreneurs employ, as operators, members of his/her family, therefore significantly increasing the family income (beyond our own capability of identifying this additional income).

This last reason is very likely to be the major reason why, despite the fact that our calculation says that only 64 % of the entrepreneurs make more than $ 150 a month, a much higher percentage of them continue to be willing to practice this activity.

b. The Teuk Saat support structure is expected to achieve financial break-even in 2020

Teuk Saat 1001 has been built progressively over years, along with the deployment of new kiosks throughout the country, and its own sustainability is based on reaching a critical mass defined, based on our models, as 240 active kiosks having an average penetration of 25% of the population. In the meantime, Teuk Saat 1001 records, every year, some operating losses (which are then compensated by 1001 fontaines), but these operating losses are expected to be lower and lower, year after year, until 2020

Evolution of the Profit & Loss statement of Teuk Saat 1001



For the first time, Teuk Saat 1001 has prepared its 2020 budget with a business unit approach:

- Projects: the department deploying new water kiosks, fully financed by grants.
- Franchise service: the department supporting existing entrepreneurs, financed by the assistance fees paid by the entrepreneurs.
- Consumables: the department managing the purchase and delivery of consumables.
- Water quality / Labs: the department ensuring quality monitoring for all the water kiosks and offering water testing services to external organizations.

The franchise services will be profitable in 2020, even if one removes the remaining subsidized revenues for capacity-building which will stop in the years to come. These franchise revenues are also sufficient to cover the projected loss of the two other commercial business units, bringing the **operational / commercial activity to a net positive result of +$41,246.**

The **projects BU will be in deficit this year (-$49,488)**, which is explained by the fact that we have taken a **conservative hypothesis of 30 sites launched this year, while our organization is dimensioned for 40** sites. Obviously, this is linked to our funding capacity, and this hypothesis will be reviewed in the months to come.

Overall, Teuk Saat 1001 expects a loss of $8,242 for 2020, amounting to less than 1% of the total OPEX. **The sustainability milestone can thus be considered as achieved**, with a need to pursue the efforts to sustain this result over time.

	Projects	Franchise services	Consumables	Water quality /Labs	Total
Subsidied revenues	$ 260,395	$ 67,710	$ 15,390	$ 41,922	*$ 385,417*
Assistance Fees	$ -	$ 511,769	$ -	$ -	*$ 511,769*
Carbon credits	$ -	$ 70,000	$ -	$ -	*$ 70,000*
Other services	$ -	$ 31,567	$ -	$ 1,800	*$ 33,367*
Consumables	$ -	$ -	$ 355,253	$ -	*$ 355,253*
Revenue	**$ 260,395**	**$ 681,047**	**$ 370,643**	**$ 43,722**	***$ 1,355,807***
COGS	$ -	$ -	$ 289,160	$ -	*$ 289,160*
Gross Margin	**$ 260,395**	**$ 681,047**	**$ 81,484**	**$ 43,722**	***$ 1,066,647***
HR	$ 270,960	$ 355,988	$ 64,185	$ 69,267	*$ 760,400*
Travel and logistics	$ 5,518	$ 96,018	$ 5,518	$ 3,311	*$ 110,366*
Offices and OH	$ 30,367	$ 44,053	$ 11,469	$ 7,853	*$ 93,742*
Franchise expenses	$ -	$ 19,458	$ -	$ -	*$ 19,458*
Labs	$ -	$ -	$ -	$ 12,958	*$ 12,958*
UV+Solaire fees	$ -	$ 69,444	$ -	$ -	*$ 69,444*
Depreciations	$ 3,037	$ 3,952	$ 725	$ 808	*$ 8,521*
Total OpEx	**$ 309,882**	**$ 588,912**	**$ 81,897**	**$ 94,197**	***$ 1,074,889***
NET PROFIT	**$ (49,488)**	**$ 92,135**	**$ (413)**	**$ (50,475)**	**$ (8,242)**
		$ 41,246			

Budget 2020, Teuk Saat 1001

c. Although the financial sustainability milestone can be considered as achieved, the model still relies on grants for the set-up of water kiosks and the Water in School program

According to our hybrid model, the initial CAPEX is being funded by grants. This approach has been historically justified by the need to maintain affordability for the rural population we target. One may argue that **now that Teuk Saat 1001 has reached breakeven, the model could self-finance (at least part of) its growth**. This is a valid point and will be treated in the next chapter.

This budget and the above analysis **do not include the Water in School program**, through which Teuk Saat 1001 reached out to 280,000+ children in 2019. The entrepreneurs are paid 1,200 riels for each jug delivered at a nearby school, within the limit of 20% of their sales volume.
With the expansion of the water kiosks' network, this means an ever increasing budget, which Sevea has estimated to "*3.5 million dollars for the period 2020-2025, an amount equivalent to what would be needed for the expansion to 400 sites under the current model. Since this amount relies on subsidies and will be endlessly increasing, the* ***underlying question is the ability of TS1001 and 1001fontaines to raise this amount of money now and in the future.***"

They however analyzed the Water in School program not as a subsidy to the entrepreneurs, but on the contrary as "*a loss of earnings of up to $700 per year for each entrepreneur as they could sell more by replacing the school deliveries by a home delivery round."*

Thus, Teuk Saat 1001 and 1001fontaines **should design the relevant funding strategy to pursue the impact of the Water in School program**, which none of us wishes to decrease, but with the conviction that this caritative activity is more a joint contribution from us and from the entrepreneurs for a social purpose, rather than a mechanism infusing the model with subsidies.

d. Teuk Saat 1001 is now a sustainable organization from a management & governance standpoint …

Decisive measures were taken during Camp IV to upgrade the capacities of Teuk Saat 1001 and improve its autonomy towards 1001fontaines.

The first measure is the **set-up of a new management team. In 2017, a new Executive Director (Frederic Dubois) was appointed for Teuk Saat 1001**, with the objectives to deliver the Camp IV project and achieve the organization financial sustainability by 2020. **A new management team was set up, as well as an Executive Committee** of 7 members: Executive Director, administration, finance, engineering, operations, partnerships.

Key management positions were filled in the areas of Academy, marketing, water quality or technical assistance. Teuk Saat 1001 is now a team of 77 employees (75 Khmer and 2 French)

The second measure is the **strengthening of support functions through capacity building.** With the support from 1001fontaines, the Finance and Admin & HR departments were set up in 2016, and led by a French volunteer till end 2017 to build the capacities of the local teams. Teuk Saat 1001 has thus built standard procedures and gained autonomy in the budget management and overall finance controlling of the organization – an activity previously highly supervised by 1001fontaines.

The Partnerships department has evolved during Camp IV, to be better tooled up and more focused on raising funds for the deployment and developing local liaising, especially with the public authorities.

Finally, Supply Chain has also become a separate department, in charge of purchasing consumables and coordinating the delivery to the entrepreneurs. Since end 2018, Teuk Saat 1001 has even internalized the delivery, in order to better serve the water kiosks.

Sevea highlights that *"the management of TS1001 made gains in efficiency and productivity thanks to this restructuration. For example, TS1001 recruited a project coordinator to improve the launching of new kiosks. Because the launch of a site involves a large part of TS1001's staff, each working on a*

specific aspect of the site's launch (construction, recruitment of entrepreneur, sales launch, etc), the introduction of a coordinator made the process much smoother and efficient by ensuring the coordination between each stage of the process. The time needed to launch a site from start to end was thus reduced from 18 to 3 months during Camp IV. Likewise, the internalization of the consumables supply chain and creation of a dedicated department enabled great gains in responsiveness, such that from 2 months initially needed for the delivery of consumables to entrepreneurs, TS1001's responsiveness decreased to 2 weeks."

The third measure is the **activation / empowerment of a local board** (which under the former management was not playing any role, the entire supervision of the strategy being led by 1001fontaines). New members have brought in insightful experience of developing sustainable actions in Cambodia. Key recruitments include Ms. Anne-Sarine Courcoux, Chairwoman of a leading F&B franchise group, Mr. Ngo Natharoun, a former member of the UNDP, and Mr. Jean-Pierre Martial, who has successfully set up "Artisans Angkor", one of the biggest social businesses in the country.

See appendix 2 for Teuk Saat 1001 Organization chart

e. … yet it will be necessary to strengthen the organization & management team in order to sustain future growth

If the current structure has been properly designed to enable Teuk Saat 1001 to achieve the Camp IV target, it is facing increasing challenges as its activities and geographical coverage are getting bigger.

Sevea states that *"TS1001 is impacted by high staff turnover, a situation inherent to the Cambodian labour market. Internal factors that might also influence this phenomenon are the increased pressure the staffs are facing because of the productivity gains, and the fact that there is no proper HR department and HR strategy (internal trainings, career development plan, initial inductions for the different levels of staff). Moreover, TS1001's over-loaded management is also in charge of routine tasks limiting their capacity to focus on priority topics. As of today, it seems complicated to integrate an additional 150 sites.* ***If TS1001 wishes to sustainably manage its growth, a restructuration appears necessary to relieve the pressure from the top management and support the field teams in performing their jobs****".*

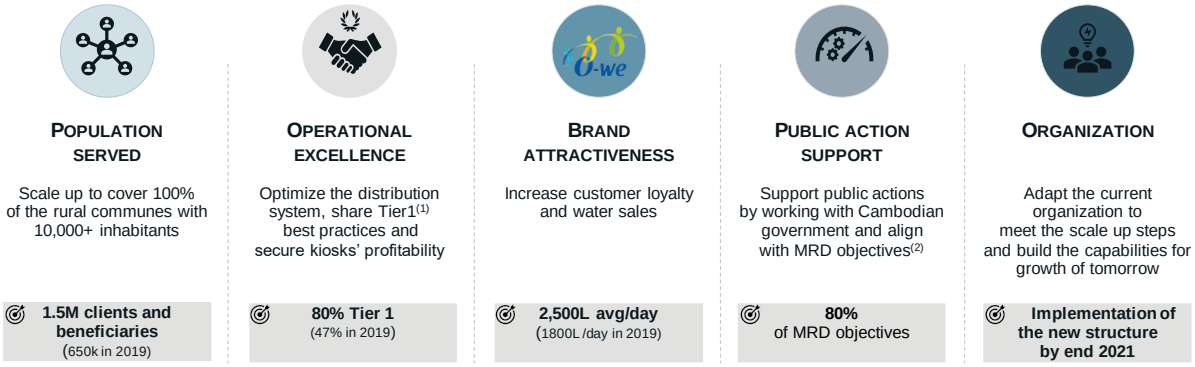
This is particularly true regarding the Operations Department, where each advisor follows in average 13 sites, and each regional business manager supervises 5 to 7 advisors. Combined with the current turnover rate (e.g. 50% of the advisors in 2019), this puts a high pressure on the shoulders of the Executive Committee and the regional business managers.

Ideas to explore include increasing the number of regional business managers, recruiting more support staff for the ExCom to free them from routine tasks, and investing in HR in the sense of induction program for newly recruited staff and career management to increase the retention rate.

5. Pathways to scale

a. Building on the Camp IV experience, an ambition scale-up strategy has been defined

Building upon the experience of Teuk Saat, and the 240 water kiosks established by 2019, we now set the ambition to **achieve a national-level impact through five strategic pillars.**

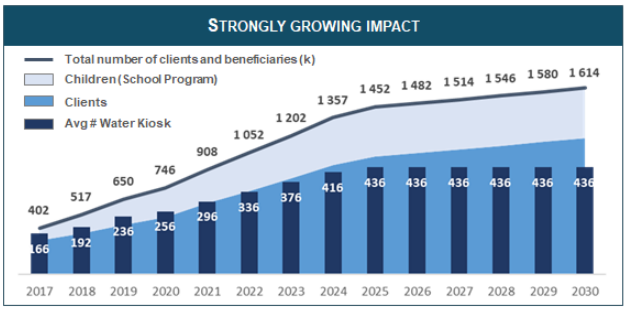


(1) Tier 1 kiosks: daily water sales >1,700L
(2) Ministry of Rural Development National Action Plan II, 2019

The perspective is to **reach all communes with 10,000+ inhabitants** and make **Teuk Saat become the national rural service provider** of safely managed drinking water services, durably serving a market of more than 4 million inhabitants. A network of 400 kiosks will be achieved (including those set up in the previous phases) providing water to **1.5 M beneficiaries** (1,000,000 customers and 500,000 children at school). Over 1,200 sustainable jobs in the communities with attractive compensation will be created. **Demonstrated financial sustainability** is to be achieved at national level: OPEX are 100% covered by water sales, and Teuk Saat is independent from philanthropic funds to finance its own growth. Also, the experience will be capitalized by 1001fontaines to other geographies.

We do not plan to significantly accelerate the pace of opening new kiosks, but rather stick to the current one of approx. 40 sites a year – a rhythm that Teuk Saat 1001 can absorb while maintaining quality all along the project.

The below charts, prepared with the support of Accenture consultants, highlight our key projections for 2030



We can segment this growth in 3 phases:

Stage 1 (2020-2021): Stabilize operational sustainability and strengthen Teuk Saat 1001 for scale

We will establish 40 new water kiosks per year, thus crossing 300 water kiosks in operation at national level. To support this network expansion, we will also set up a new service platform to enable a better regional coverage. We will also launch the consolidation streams.

Expected results:

- **900,000 end-consumers** drinking safe water
- **Economic sustainability on the OpEx**, ensuring long-lasting support to the entrepreneurs

Stage 2 (2022-2025): Achieve national scale and demonstrate capacity to progressively self-finance the growth

We will continue our national coverage by establishing 40 new water kiosks per year from 2022 to 2024, with the ambition to cover all the rural communes having more than 10,000 inhabitants. Similarly to the first phase, a fifth platform will be set up to ensure proper service delivery to the water kiosks. We will explore new levers to grow the water sales, and finalize the consolidation plan. The profits will also be progressively reallocated to funding the growth, another demonstration of Teuk Saat 1001's sustainability.

Expected results:
- **1.3 million end-consumers** drinking safe water
- **No more philanthropic funds** required for Teuk Saat
- 80% water kiosks self-financed and able to support their growth

Stage 3 (2026-2032): Support the portfolio of sites to maintain operational excellence and financial viability

To date, we have low visibility on our capacity to further expand water kiosks in rural areas beyond 2025. This phase is for the moment intended to focus on strengthening the fleet of sites. Keeping in mind the social innovation DNA of 1001fontaines, we however expect to come up with new ways to expand our impact in Cambodia beyond the establishment of water kiosks.

Expected results:
- **1.6 million end-consumers** drinking safe water
- **2,750 L / day** sold in average per kiosk

The Camp IV targets were definitely significant milestones for 1001fontaines, having enabled Teuk Saat 1001 to be positioned for scale, and to now envision to **become the national rural service provider of safely managed drinking water services, durably serving a market of more than 4 million inhabitants.**

b. To scale, we will have to integrate the changing market dynamics in rural Cambodia, starting with securing our license to operate through stronger ties-up with the public authorities

In spite of our positioning as the largest safe provider of safe drinking water in rural Cambodia, it appears that **we haven't sufficiently invested in developing relationships with the relevant ministries, resulting in a lack of coordination between our actions and the government's strategic planning for the coming year**s. The Ministries of Rural Development (MRD) and of Industry, Science, Technology and Innovation (MISTI) are currently drafting a National Action Plan for 2020-2025 (NAP II), in order to achieve national access to water supply. The draft document specifically mentioned an objective of '*300 community-managed bottled drinking water systems (20L) established and operational that sustain disasters and climate risks*' by 2023, thus fully aligned with the intervention of Teuk Saat 1001, but does not integrate our work neither in the situational assessment nor in the future projections.

This was identified as a risk for Teuk Saat 1001 by Sevea:"*There is no mention of TS1001 and its work in this document, despite its massive contribution to the sector, already having established 238 kiosks by the end of 2019. The NAP II hasn't either taken into account the multitude of privately-owned water kiosks that also run under the MISTI, of which the total number is currently still unknown. […]*
Given the health problems linked to the overall poor quality of the bottled water sector, the government might plan on controlling and structuring the sector. Since it does not recognize TS1001, ***TS1001 could be excluded from the new actions or strategies taken towards increased access to safe water in rural areas. The sustainability of TS1001 would definitely be more assured if it was recognized***

and had the support of the MRD and MISTI *(the worst being that the government would support a competitor).*"

Besides, the ongoing decentralization in Cambodia will tend to provide communes and districts with their own budget for development, which could become an interesting source of funding for Teuk Saat 1001, for instance for the Water in School or the rehabilitation of older sites.

We thus need **to invest more in government liaising in order to benefit from the opportunities of the rural development sector being structured, and to avoid the risk of being supplanted by another organization as the government's prime partner for safe drinking water in rural areas**. For that, we are perfectly positioned with regards to our assets and credentials, i.e. 1) 25% of the population covered by the 238 kiosks; 2) a reference in terms of water quality and hygiene practices (with 3 regional labs); and 3) the local impact of the Water in School Program within the communities

This intensification of our relationships with the public authorities **can only happen if we clearly state our vision for the positioning of Teuk Saat 1001 in Cambodia**.

Sevea has supported us in clarifying the alternative before which we stand: **either opting for a public way, whereby kiosks remain the property of the communes, and Teuk Saat enters in a more formal partnership with the government; or taking a more private orientation**, where the kiosks could be owned by the franchise, or entrepreneurs themselves.

The public way means building a much stronger PPP with the Cambodian government, which is highly dependent on the government's will to go ahead in this direction, and under which Teuk Saat 1001 would have to comply to new constraints and potentially accept to share control on the water kiosks.
The private way would result in not working with the communes the way we are doing it today, and thus not keeping this safeguard for the entrepreneurs, who are today liable in front of the local authorities. We might also end up competing against a public water provider if the government implements its strategy of universal coverage.

1001fontaines and Teuk Saat 1001 must take ownership of these options, investigate them further by involving all the stakeholders (staff, governance, strategic partners…) and take a clear stand in the coming months.

c. New market opportunities should be explored on our pathway to scale

The network of water kiosks and regional platforms that we have set up in the past 15 years now represents **an asset that can be leveraged to diversify the activities of Teuk Saat 1001**, in line with its social mission, either to improve the sustainability of the franchise, or to expand our impact.

Key options identified include:
- Positioning our laboratories as public resources for water quality monitoring in rural Cambodia
- Diversifying the products sold by the entrepreneurs (e.g. charbriquettes, fortified food…)
- Internalizing the plastic value chain, including the recycling of used jugs
- Expanding to urban areas with an adapted operating model (e.g. Water ATM)
- Exploiting the data collected on rural Cambodia (e.g. infrastructure condition, consumers' profile…)

On all these opportunities, 1001fontaines intends to keep its field-driven DNA: qualifying the need, designing pilots, testing in the field and collecting feedback from the users, then deploying the relevant solutions. Investigating these ideas will definitely take time, and shall have dedicated resources in charge of leveraging our existing know-how and local footprint, and bringing in external expertise when required.

d. The funding mechanism for scale has the potential to evolve, but is still under work in progress

Given the scale already reached by Teuk Saat 1001, and the sustainability on the OPEX, 1001fontaines is wishing to investigate the different opportunities to fund the growth. The operational projections leading to an estimation of USD 6 million cumulated profits over 10 years, it seems feasible to integrate a part of non-philanthropic funding to support the growth.

We are currently modelling potential mechanisms with the help of Accenture consultants, to evaluate the best way forward for Teuk Saat 1001. The preliminary conclusions tend to show that, with the target to reach 430 kiosks under the current model, **Teuk Saat 1001 shall be able to finance approximately half of its growth through non-philanthropic funds**, i.e. soft loans adapted to an organization shifting from donations to blended finance. The exact conditions (mix, interest rate, reimbursement period) are being further investigated at this stage.

In addition to the pure financial feasibility of such funding, 1001fontaines wishes to give a rationale to this shift, with several scenarios being studied:

- Using soft loans to fund the hardware of water kiosks, as the tangible assets that will generate the profits, and raising grants for capacity-building and innovation;
- Having a chronological approach, with grants at the beginning and a progressive shift to loans with the increasing profits being allocated to reimbursement.

For Sevea, the most relevant scenario for Teuk Saat 1001 would be the following:

- *"The launching of new kiosks as well as the "Water in School" program could both continue to be funded by grants or evolve towards public funding because the implementation of this kind of water infrastructures and the access to water in school are usually public investments and expenses.*
- *The development of new platforms and the capacity building could be funded by Teuk Saat 1001 through patient 'impact' loan as it is linked to their franchise activity.*
- *The remaining innovations could be funded by grants to further support the social and environmental impact of Teuk Saat 1001."*

It is thus **already clear that this is a huge opportunity for 1001fontaines to open itself to new partnerships, and to intensify the efforts to obtain public funding, with the capacity to now ask a mix of subsidies and loans.**

To move forward, we need to better understand the expectations of the potential investors and donors to finetune our proposition. This is a subject on which receiving feedback from our partners would be highly beneficial for 1001fontaines.

The operational direction is thus clear for the coming 5 years, and will be supported by the ongoing work on the funding mechanisms, in order to make Teuk Saat 1001 cross a new step in terms of sustainability.

6. Conclusions & Perspectives

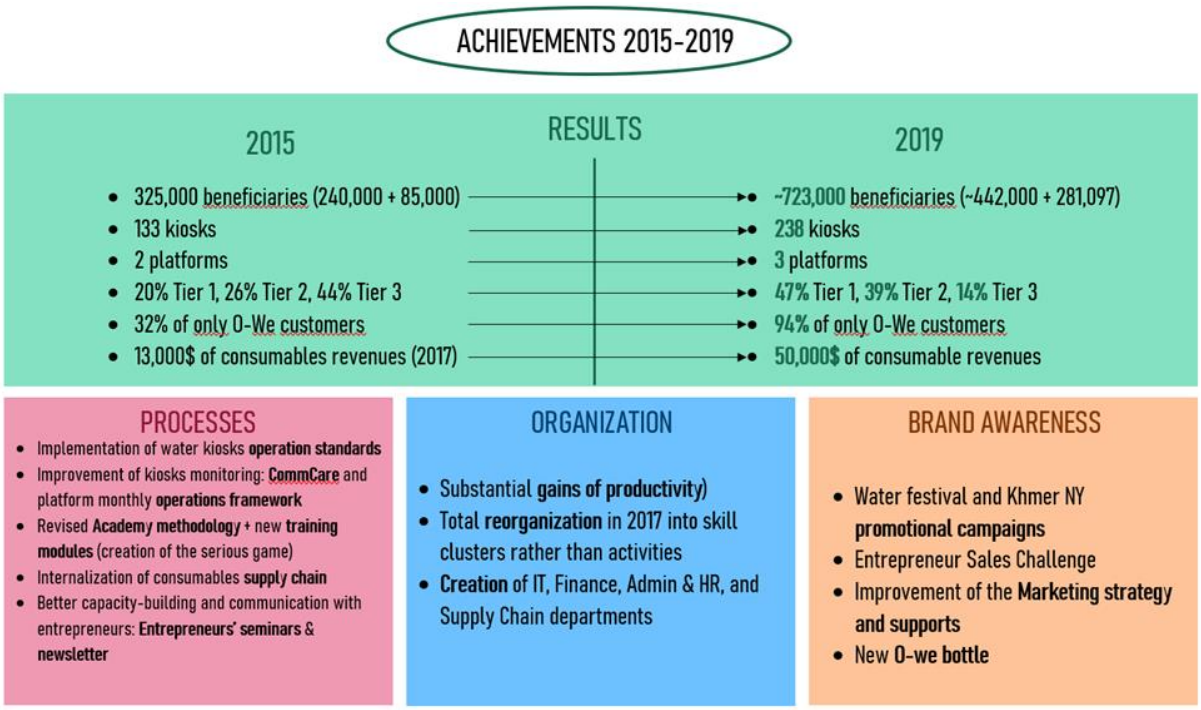
a. Overall evaluation of the Camp IV project

Extract from the Sevea report:

"*The project Camp IV implemented between 2016 and 2019 by TS1001, with the support of 1001fontaines, has managed to* ***stay highly relevant in the Cambodian context*** *and finds its legitimacy in the needs and expectations of the rural population (lack of access to safe water, lack of quality control in the bottled-water sector, need for convenience). It coincides with the Cambodian government's guidelines in terms of access to safe water in rural areas, works alongside other water supply solutions and inserts itself well in the strategies and interventions of other stakeholders while managing to not be redundant. However, if TS1001's model is and will stay relevant, it will have to* ***adapt to new risks emerging from a rapidly changing context****. As a consequence, TS1001 will have to finetune the existing model to mitigate risks and keep its ability to expand, while* ***defining a long-term vision and identity for TS1001****, vision that does not exist yet.*

Over the years, TS1001 has ***refined and optimized the processes of site opening****. As a result, TS1001 successfully managed to* ***achieve all its targets for Camp IV****, in terms of number of sites opened (234/240), number of beneficiaries (723,000/720,000) and coverage (2/3 of Cambodia). The new Kampong Cham platform reached all its targets as well and showed very good results both in its functioning and efficiency with for example an average growth in sales volumes of 47%, compared to 6% on a national scale.*
2020 will also be a turning point for TS1001 since it will reach breakeven. Growing revenues will allow TS1001 to be self-sufficient for operating costs, but it needs to be reminded that they might not be able to pay for new kiosks or platforms in the short-term without subsidies.

Overall, the ***efficiency of the project is good*** *since TS1001 has managed to comply to the budget established for Camp IV. Over the years, changes in organization and the implementation of new tools and processes have enabled TS1001 to gain in autonomy towards 1001fontaines, to increase its productivity and to maximize its responsiveness. The achievements of TS1001 during Camp IV are shown below:*



In terms of impacts, Camp IV secured the positive impacts of previous phases, especially compared to other sources of safe water (boiling water especially): (1) money savings for customers thanks to the affordability of O-we water; (2) time-savings and convenience ensured by the service provided by TS1001; (3) positive health impact guaranteed by the quality of O-we water; (4) very low environmental impact linked to the design of stations; (5) reduced vulnerability of rural population in terms of water access. Nonetheless, the evaluation of these impacts can only be done through proxis, and it could be valuable for TS1001 ***to introduce non-economical KPIs to assess its results*** *and build its strategies.*

Finally, as of today, ***TS1001 is able to ensure the conditions for self-supporting sites, platforms and the sustainability of the whole model both in economic terms, as well as in the management, governance and services offered by the franchis****e. Nonetheless, if those conditions are met now, they might need to be strengthened in the future, for instance by* ***mitigating turnover (of staff, entrepreneurs, advisors), ensuring the maintenance of sites, incorporating resilience in the design of kiosks, increasing wages of entrepreneurs or by developing additional revenue sources****.*

To conclude, ***Camp IV gets a total grade of 17/20****: TS1001 has proven once again with Camp IV the relevance of its action in the Cambodian context, its capacity to expand and its effective impact on the health of rural populations.* ***The transformations undergone by TS1001, its tools and processes in recent years have increased the momentum, impact and productivity of the model.*** *Therefore, it is able to ensure the conditions for a self-supporting activity as of today. Nonetheless, given the evolution of the national context,* ***TS1001 might need to finetune its model in order to keep extending. The position, identity and objective of TS1001 in the long-term future will also need to be defined****."*

See Appendix 3 for the summary of the notation

b. Next steps for 1001fontaines

In Cambodia

The conclusion of the Camp IV project has been rich in learnings, achievements and identification of further opportunities to improve and grow. 1001fontaines and Teuk Saat 1001 need to **finalize a dense strategic work that started early 2020**, aiming at:

- Finalizing the design of the consolidation plan
- Framing the innovation streams and allocating resources to them
- Investigating the two pathways to scale
- Finetuning the funding model for growth

This shall be completed by June 2020 at the latest, in order to secure funds by the end of 2020 and place Teuk Saat 1001 on track to scale up across Cambodia in the coming years.

In our other countries

Having operational sustainability within reach in Cambodia reinforces our determination to **accelerate the pace to this milestone in our other geographies of work**. The key learnings are probably for the Myanmar project, which is a very close replication of the Cambodian model, and where we therefore need to take all the insights to build a faster trajectory to operational viability.

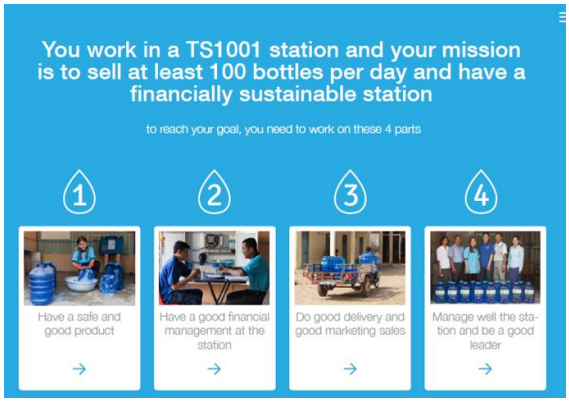
Appendixes

Appendix 1 – Description of the capacity-building programs to improve operational excellency of the model

- **Identify and roll-out the best practices of top-performing entrepreneurs**

This project started with the diagnosis that there was a lack of guidelines for the entrepreneurs regarding the way they should structure and operate their business. Based on the observation of the seven best performing sites of the portfolio, some best practices were identified, such as: a minimum number of 3 staff per site with a clear working organization, keeping 50 bottles in stock, start the working with the first delivery already produced …. Those best practices have then been rolled-out within the entire portfolio

- **Redesign the Social Entrepreneur training Academy**



Whilst our in-house training cursus had already been rolled-out prior to Camp IV, the methodology has been redesigned and made more concrete & operational: more intensive on-site coaching, apprenticeship of at least two weeks in a Tier-1 site to practice the learning, innovative material (digital “serious game”), on-the-job evaluation …

Training module (Serious Game)

- **Reinforce the “O-We” brand through a new social marketing policy**

Several projects were launched to strengthen the Teuk Saat 1001 marketing capabilities and create some differentiation for the O-We brand on its market:

- Re-branding of O-We with the support of a communication agency to better fit the expectations of the clients. We shifted from an abstract logo on a white background with the list of benefits (health, safety etc.) to an embodied brand showcasing a healthy family, happy to drink a quality product. O-we is now positioned as an a spirational product, which people could fancy to have at home.
- Redesigning all marketing materials in accordance with the customers’ benefits we want to promote
- Designing and implementing a proprietary 20L bottles enabling our water to differentiate itself from the competitors
- Strengthening Teuk Saat marketing capabilities through the recruitment of a Marketing & Sales Manager,
- Launching 2 yearly promotions (New Year & water festival): two-week operations targeting consumers, with attractive discount schemes to recruit new clients (e.g. the initial deposit for a new jug at 50% discount), and local and national lotteries organized to create enthusiasm around the brand (phones, bikes or TVs for the national winners; free water refills, O-we caps, eco-cups for the local winners)
- Launching 2 yearly sales challenges for entrepreneurs (Dry & rainy season): cash rewards to the entrepreneurs having increased their sales more than the sites with a similar initial level of performance. The rewards ranged from $300 to $1,000 for the most successful sites, a significant amount when the average monthly salary is closer to $150. These operations ambition to boost the motivation of entrepreneurs to grow their sales

Water festival promotion

Proprietary bottle launched in 2019

- **Build a "O-We family" franchisees network**

With more than 700 people working in the water kiosks, a new challenge arose: animating the large network of entrepreneurs, to have them take the most out of the franchise, and to increase their loyalty and motivation to grow their activity. We came up with the concept of "O-we family", to represent the feeling of belonging to this network.

During Camp IV, Teuk Saat 1001 has tooled up the O-we family, starting with a bimonthly newsletter shared with all the entrepreneurs and the commune representatives through the advisors. This typically encompasses success stories, reminder of good practices, and announcement of upcoming marketing operations.

A yearly entrepreneurs' seminar has also been taking place since 2018. Participants were trained on sales, customer service or rural marketing concepts. They got the opportunity to learn and share their experiences with other entrepreneurs from various provinces. Exposure visits were organized at a nearby water factory, to show them the industrial version of their work and inspire them to maintain the highest standards of quality.

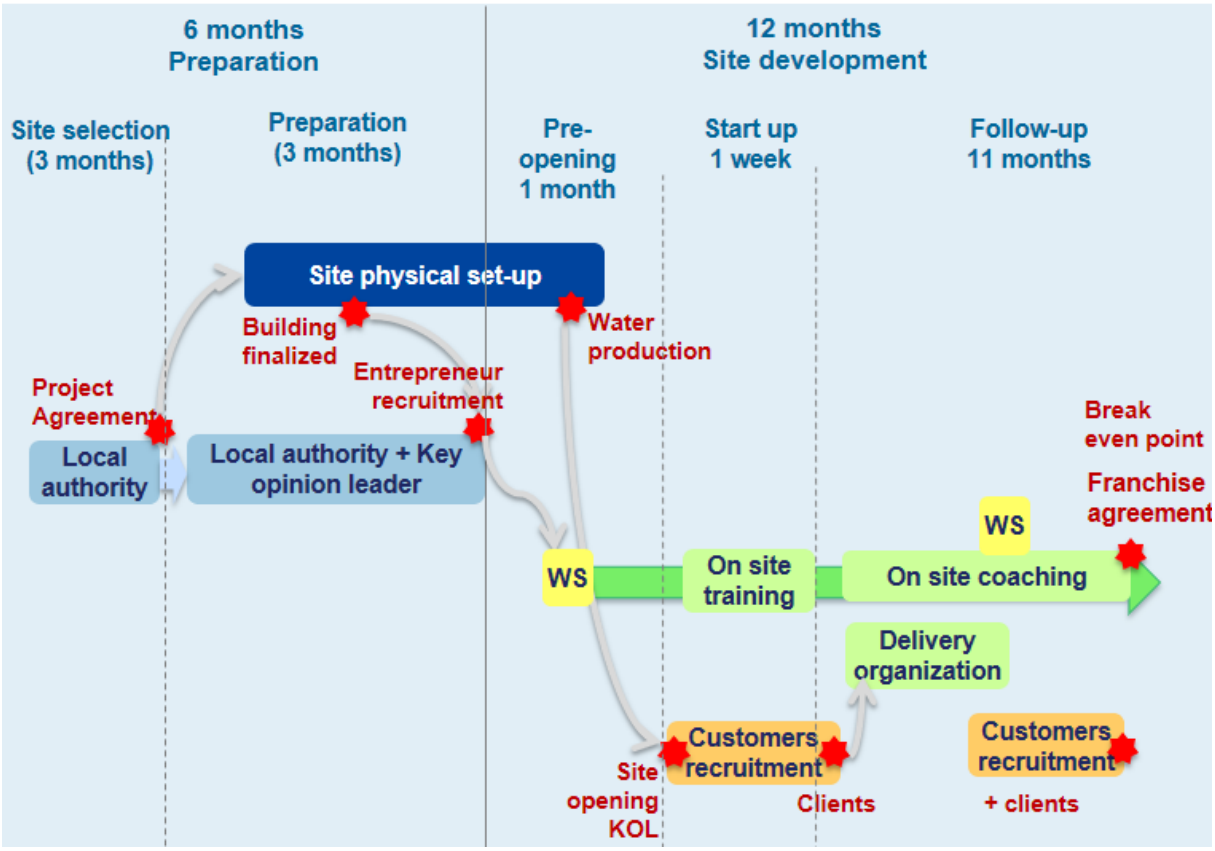
- **Standardize the site-launching methodology**

The launching methodology of sites has also been finetuned over the Camp IV project, enabling Teuk Saat 1001 to operate under a fully-standardized approach:

- Selecting the commune: we only implement the project where local communities are interested, which gets formalized by a project agreement signed with the chief of commune. We also confirm the basic conditions are gathered: sufficient catchment area, availability of land and water source (given by the community), correct roads to organize home-delivery;
- Building the water kiosks: we set up a 50sqm building, and install the required water treatment system (micro-filtration + UV lamp) to produce water at WHO standards;
- Recruiting and training entrepreneurs: along with key community members, we select and train a local person thanks to our in-house cursus called the Social Entrepreneur Academy. This enables them to get the required know-how to manage the water kiosks;
- Mobilizing community: we identify key opinion leaders in the community, and train them to support the entrepreneur and promote the importance of safe drinking water in the community. This phase

also includes handing over the ownership of the water kiosk to the communes, to increase their long-term commitment;

- Launching activity: our sales teams join the entrepreneurs for a week of site opening, organizing door-to-door to explain the benefits of safe water and promote our product;
- Supporting the water entrepreneurs: in the first months, entrepreneurs receive a specific support to ensure they are able to sustain their activity. Our local teams visit them twice a month to monitor their ability to sustain and grow the water sales, ensure they master and respect the good practices of water kiosk's management, and coach them to help them develop their business.



New project methodology framework

Appendix 2 – Organization chart of Teuk Saat 1001 by November 2019

Appendix 3 – Summary of the notation from the external evaluation

Scoring		Verbatim
Relevance 3/4 	Long-term relevance in the rural Cambodian context	*"The project finds its legitimacy in the needs and expectations of the rural population. It coincides with the Cambodian government's guidelines in terms of access to safe water in rural areas."*
Effectiveness 3.5/4 	Achievements of all the Camp IV targets	*"Teuk Saat successfully managed to achieve all its targets in terms of number of kiosks opened (90/90), active sites (238/240), beneficiaries (723K/720K) and coverage (19/25 provinces)."*
Efficiency 3.5/4 	Respect of project planning and productivity gains	*"Changes in organization and the implementation of new tools and processes have enabled Teuk Saat to gain in autonomy, to increase its productivity and to maximize its responsiveness."*
Impact 3.5/4 	Evidence of impact on health, economy and environment	*"Camp IV secured the positive impacts of previous phases, especially compared to other sources of drinking water, such as boiling surface water."*
Sustainability 3.5/4 	Sites, platforms and franchise services financially viable	*"Teuk Saat can ensure the conditions to self-support sites, platforms and the sustainability of the whole model in economic terms, as well as in the management, governance and franchise services."*