Job description – Senior Expert - Water Quality, 1001fontaines

September 2021

# Context

For 15 years, 1001fontaines has pioneered and optimized a model called water kiosks, enabling the decentralized production of safe drinking water in a sustainable manner.

This model has proven its efficiency over the past 15 years, positively impacting the health of vulnerable populations, creating sustainable jobs in the field, and maintaining a quality of service over time. To date, 1001fontaines counts 275 water kiosks in operation, serving water to 900,000 people on a daily basis, across 4 countries: Cambodia, Madagascar, Myanmar and Vietnam.

We intend to scale this model, across our current countries of operation, and in new geographies, in order to reach 3 million end-consumers by 2025 and 8 million by 2030.

Achieving this ambition requires 1001fontaines to strengthen our in-house capabilities, in order to provide expertise to the ongoing and future country programs.

# Role and responsibilities

## Objective of the position

The Senior Expert – Water Quality will support the operations in the different countries where 1001fontaines is present, by providing technical expertise to solve emerging challenges, and by optimizing the treatment solution and related procedures to ensure water quality in all the geographies.

## Key responsibilities

* **Definition of the 1001fontaines Water Quality strategy and monitoring of its implementation**

The Senior expert will be responsible for assessing the needs of the different country, and for the design of an appropriate strategy to support them efficiently.

This will notable include: assessment of facilities and procedures of every country project; regular interviews with the country management to identify emerging needs; benchmark of emerging technologies; analysis of opportunities to leverage water quality (e.g. testing services for other organizations); and definition of a 3-year roadmap to support the different projects.

The Senior expert will submit bi-annual reports to the 1001fontaines CEO on the progress towards the targets.

* **Ongoing support to the Water Quality teams in the different geographies**

For existing country projects

The Senior Expert will suggest improvements in water quality procedures (sampling, testing, entrepreneurs’ level processes), based on discussion with the local teams, interaction with entrepreneurs, and review of water quality results.

This support will include strengthening the capacities of the teams, to ensure they master the upgraded procedures. When required, this could involve the organization of workshops and the creation of training manuals for the teams.

A practical application of this responsibility will be for Myanmar, where the project is still recent, and the maintenance procedures for the technical equipment are still not fully optimized.

The Senior Expert will also support the country teams in identifying the relevant suppliers for technical materials, and when possible coordinate the mutualized purchase between the countries.

S/he will also prepare yearly assessment on water quality management for each geography, to report to the 1001fontaines management on the countries’ performance.

For new country projects

In the future, 1001fontaines intends to start new projects in other geographies, which will require support from the Senior Expert to understand the specificities of water quality in the area, and select the relevant treatment solution to reach WHO-level standards.

Once the project start, the Senior Expert will support the country teams in recruiting the local staff for Water Quality management, and in training them to adequate procedures and tools.

* **Management of optimization and innovation projects**

Based on the assessed needs, the Senior Expert will design and launch relevant pilot projects to improve the treatment solution. This could include the following areas: energy consumption, reduction in water losses, upgrade of the technology, introduction of sensors for better quality monitoring, automation of some steps of the water production process, certification of the laboratories, resilience to climate change…

This will require interaction with the country teams (management and head of relevant departments) to ensure the project is feasible in the field and will provide the needed learnings.

One already approved project will be the revamping of the kiosk in Cambodia, to upgrade its current design and make it more flexible to fit in different commune contexts (size, density…). This project will involve a cross-functional team (engineering, supply chain, marketing…) and the Senior Expert will contribute to it to design and dimension the water treatment solution, and explore the possibility to improve the efficiency of the process.

* **Emergency support for field challenges**

Field teams sometimes face unplanned challenges related to water quality, and need specific expertise to understand them in depth and implement the relevant solution. The Senior Expert will be responsible for this emergency support, with organization of field missions when required.

For example, the Myanmar entrepreneurs have experienced in 2020 the presence of “white flakes” in the purified water, which are not harmful for health but create a lack of trust among the consumers, and make the selling process more difficult. In such a situation, the Senior Expert is expected to provide a practical solution to the problem, and to follow up on the results to ensure the issue is solved.

* **Capitalization and knowledge dissemination**

Building on the past experience of 1001fontaines, and the continuous upgrading of practices and tools, the Senior Expert will be responsible for maintaining a centralized database of documents presenting the latest version of the water treatment solution and the quality procedures per country, and the generic good practices recommended for all the 1001fontaines projects.

The Senior Expert will also participate to a Community of Practice, gathering the heads of water quality departments of the different countries of operation. This group will gather on quarterly basis to discuss challenges and learnings from the field, with the Senior Expert ensuring the preparation and coordination of these meetings, and following on the next steps when relevant to foster collaboration between the countries.

## Position in the organization

* Reporting: 1001fontaines CEO and country director in work location

# Required skills and qualifications

* 10 years of experience on water quality, including high familiarity with bacteriological and physico-chemical contamination
* Comprehensive knowledge of water treatment technologies
* Past experience in conducting R&D projects
* Experience working in developing countries / with international teams. Strong project management skills
* Representation skills (proposal writing, physical presentation)
* Ability to interact / work with the academic world
* Proactive attitude to suggest improvements and new ideas
* “Hands-on” philosophy and teamplayer

# Conditions

* Location: Based in Cambodia, with required travel to the other countries of operation
* Contract type: Full-time contract

Please send CV and application letter to [ju.ancele@1001fontaines.com](mailto:ju.ancele@1001fontaines.com)