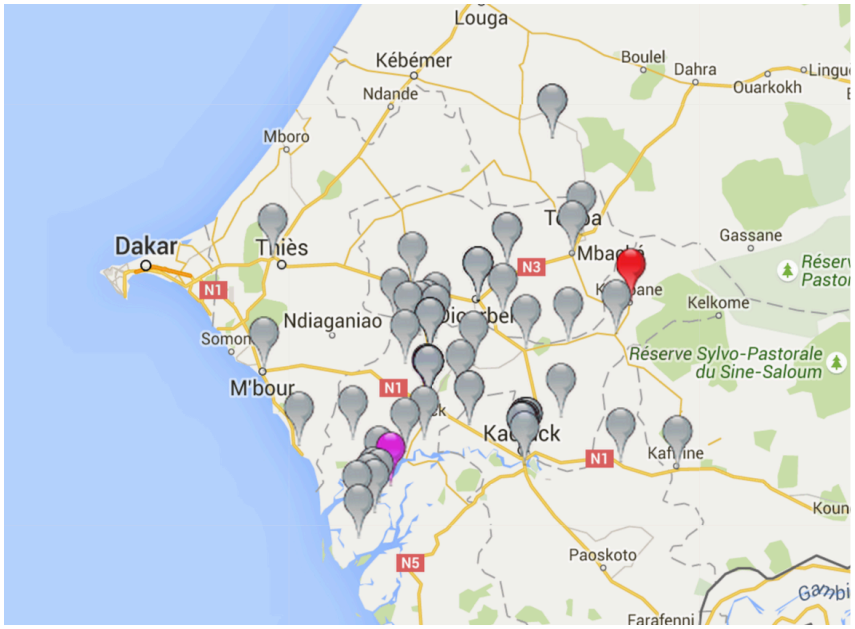
SWISS FRESH WATER

Access To Water Foundation

Taking a water kiosk business in Senegal from pilot to scale

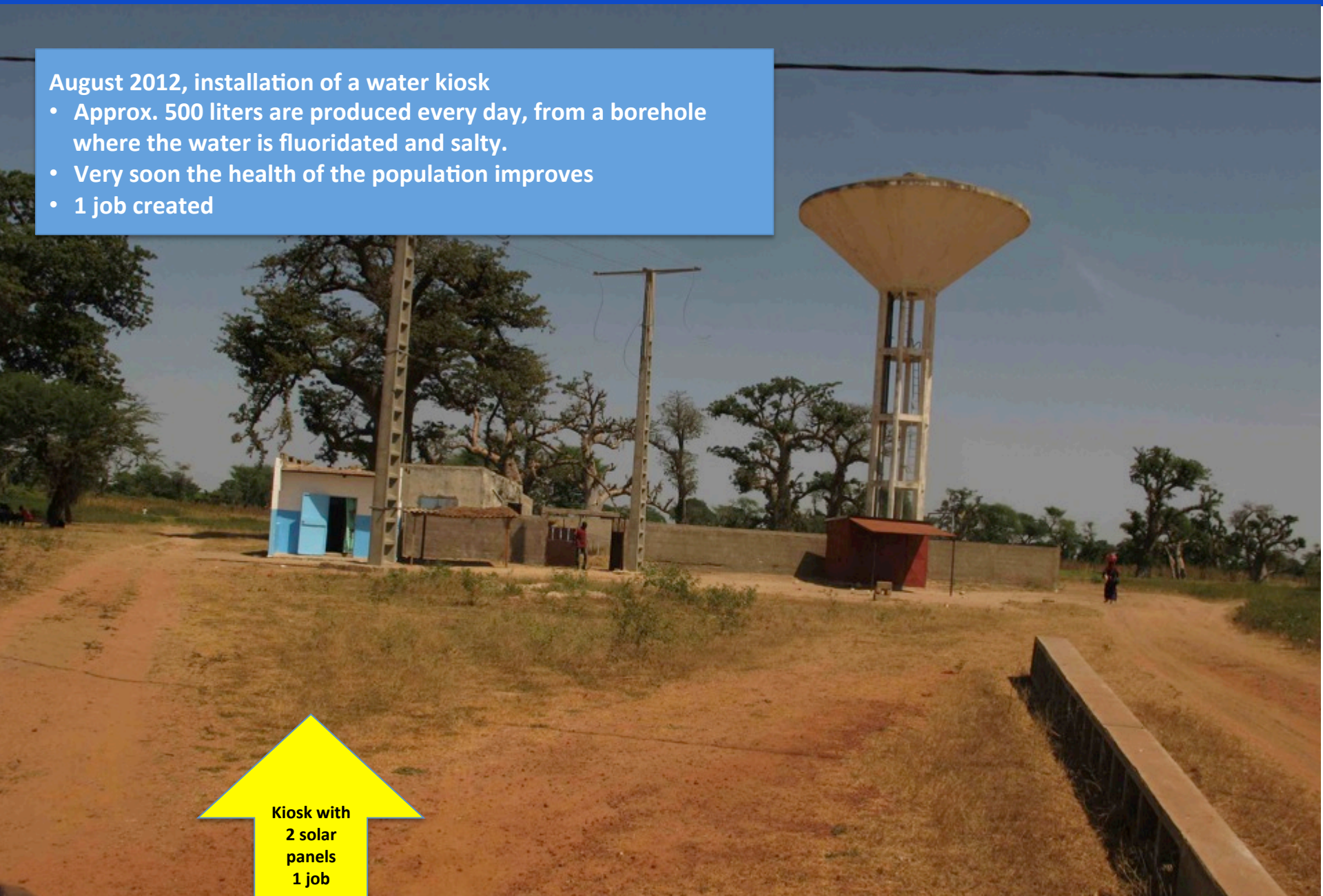


Kiosks + Proactive Support = Water + Jobs = Sustainability

2 July 2015 @ Eawag, Dübendorf

1) The Kiosk of Djourbel, 6’000 l/day

2) The kiosk of Wakhaldiam: Direct & indirect jobs

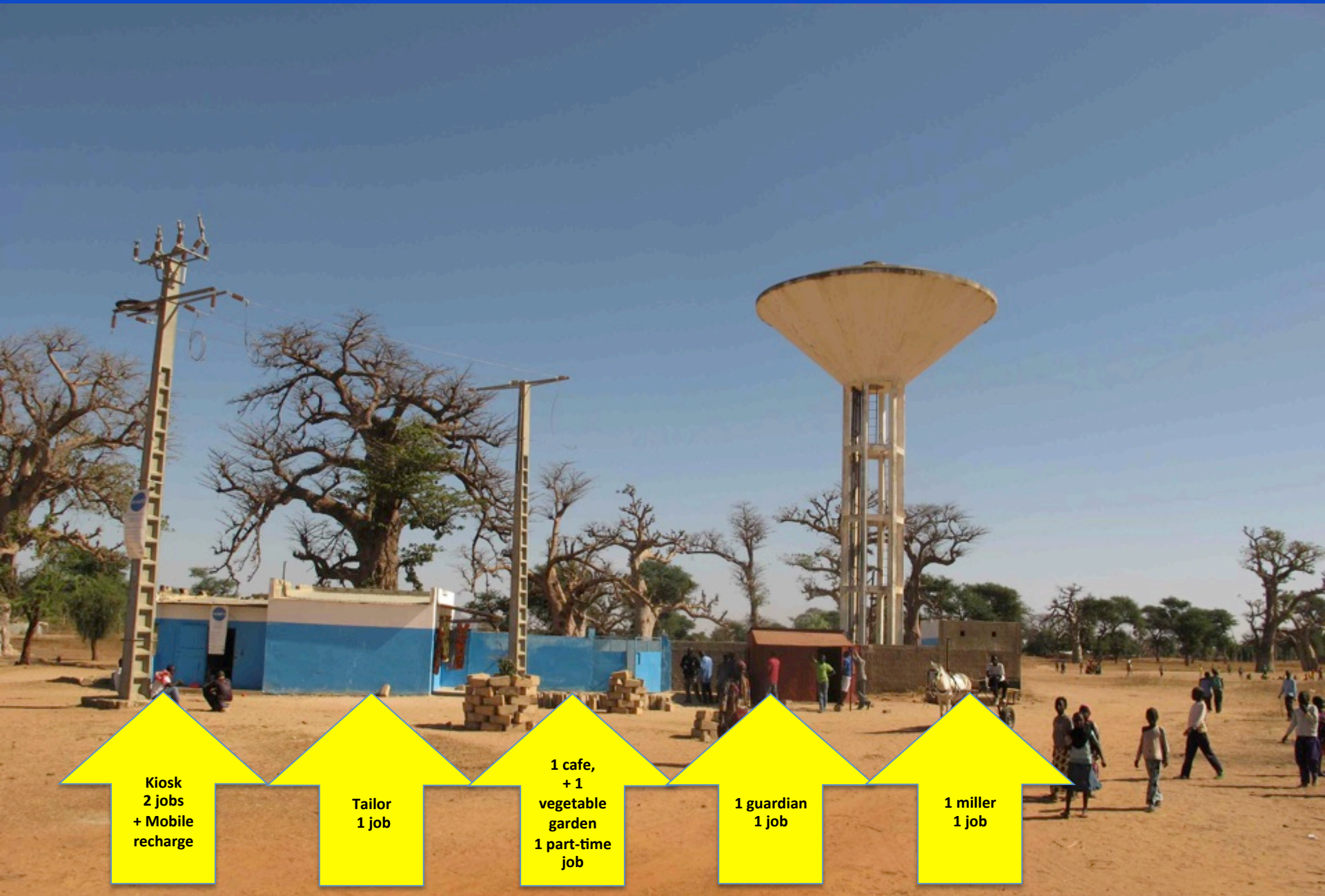


August 2012, installation of a water kiosk

- Approx. 500 liters are produced every day, from a borehole where the water is fluoridated and salty.
- Very soon the health of the population improves
- 1 job created

Kiosk with 2 solar panels 1 job

2) 16 months later, jobs = 6

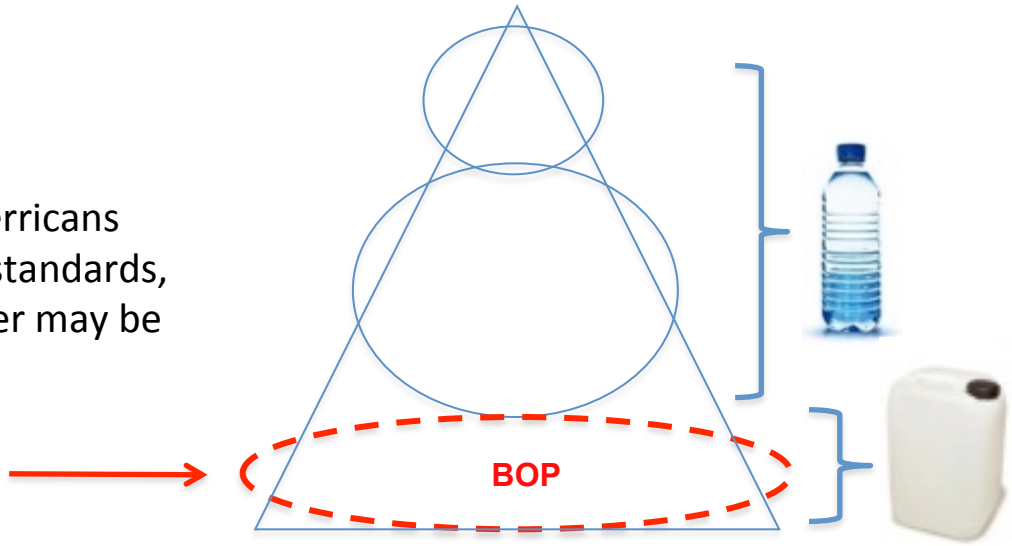


Swiss Fresh Water Ltd
&
Access To Water Foundation

The social business

Social responsibility:

- Target : private market and the people at the bottom of the pyramid (BOP),
- On-site production of water, in recycled jerricans
- High quality water, complying with WHO standards,
- According to the business model, the water may be sold from 0.3 to 1.5 cent$ /litre to pay the maintenance and the working places.



SFW & A2W generate a high impact :

- Improves access to safe water,
- Improves health,
- Improves education, Know-how sharing
- Creates working places,
- Reduces rural exodus,
- Respects the environment.

Training for operators, Senegal 2012

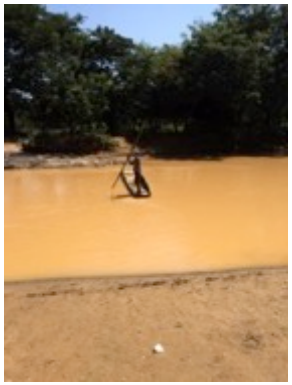
SFW has set up the Access To Water Foundation to support small villages and children, 2012 in Switzerland

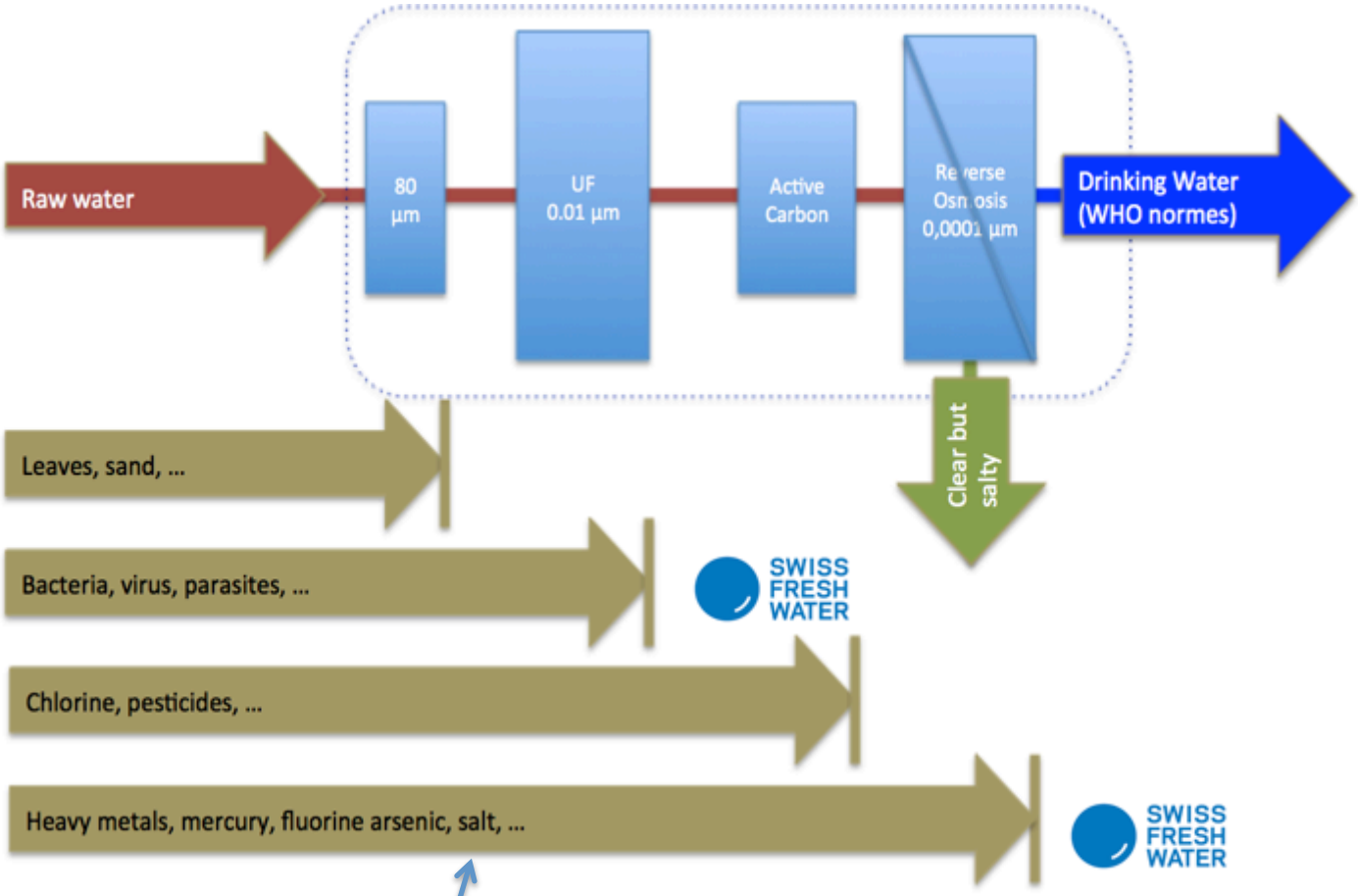
SFW created SENOP which is in charge of maintenance in Senegal.

SFW support the Global Compact

The Technical Solution

The technical solutions





Swiss Fresh Water's solution

Adapted machine:

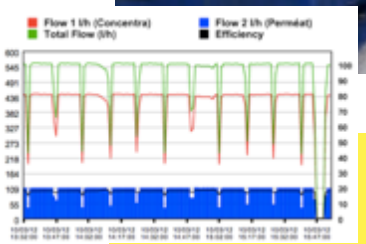
- From 4'000 to 14'000 liters/day depending on the model,
- Ultra Filtration and Reverse Osmosis,
- Electrical grid or solar panels.

Decentralized Maintenance:

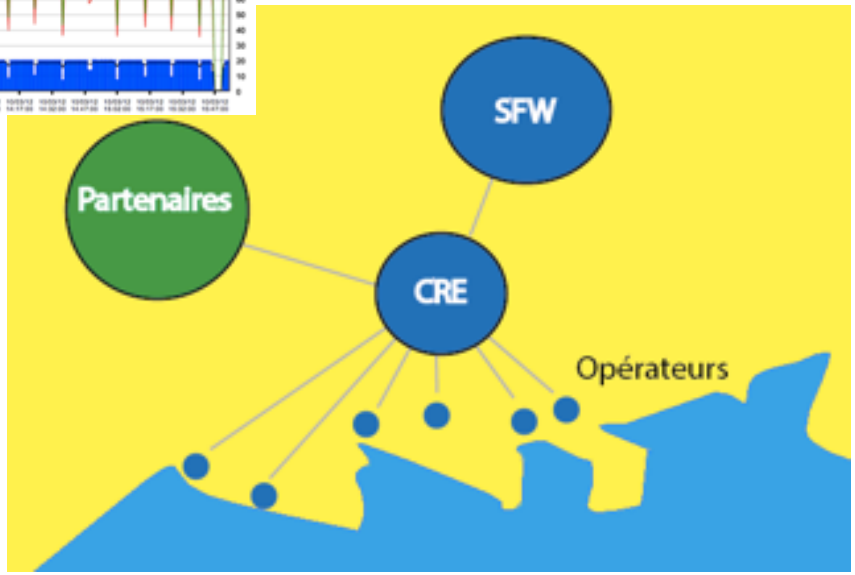
- Remote telemetry control enables decentralization,
- Regional Maintenance Center (RMC) handles the maintenance,
- Assisted by SFW in Switzerland,
- The machine can be remote controlled by SMS.

Economic:

- The machine from 6'950 € + solar panels + transport + installation = 10-15'000 € without tax,
- Maintenance, as annual subscription, from 1'350 to 2'500 € for 24h/24 (~ 0.18 cents/ liter),



Telemetric follow-up via GSM…



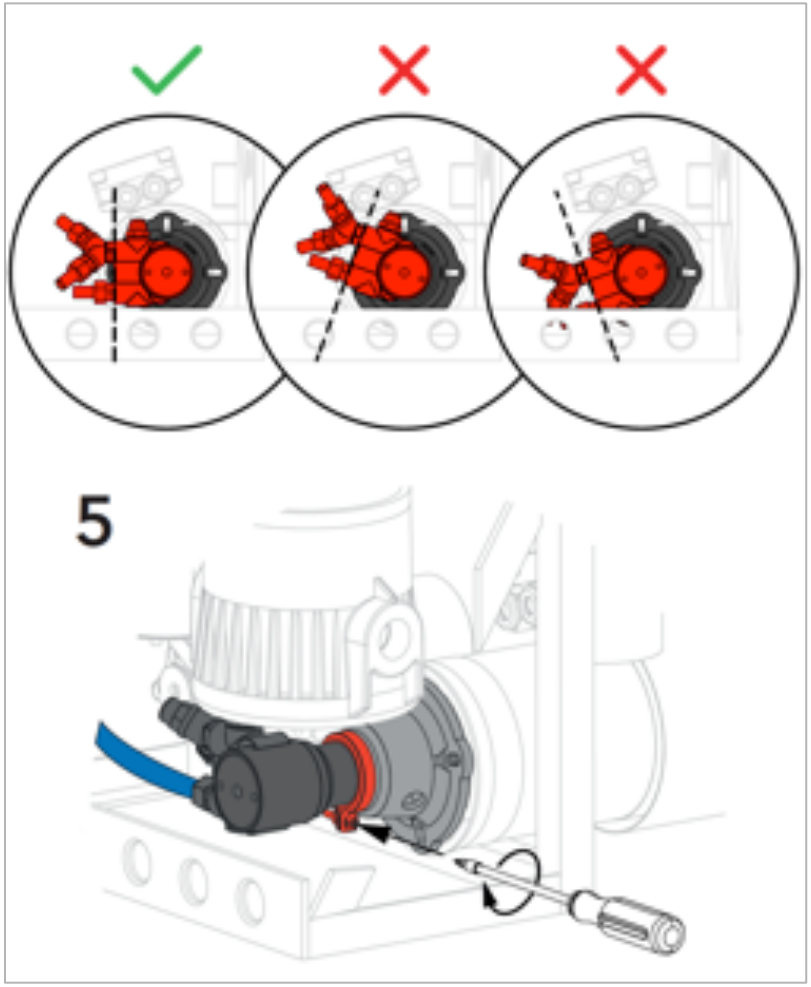
Ready for know how transfer

An effective distance monitoring :

- This monitoring may accompany the maintenance
- and also the "economic" management of the kiosk

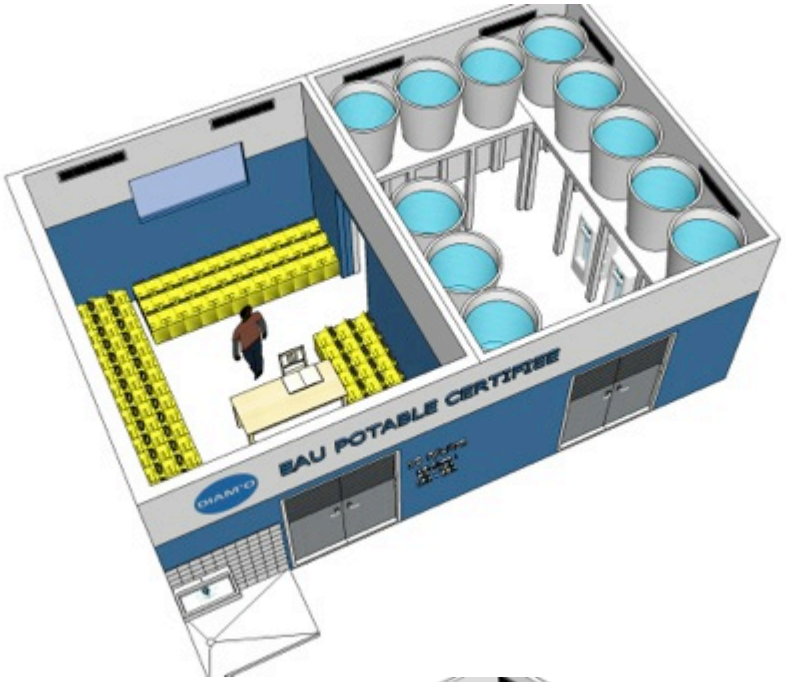
Adapted user guides :

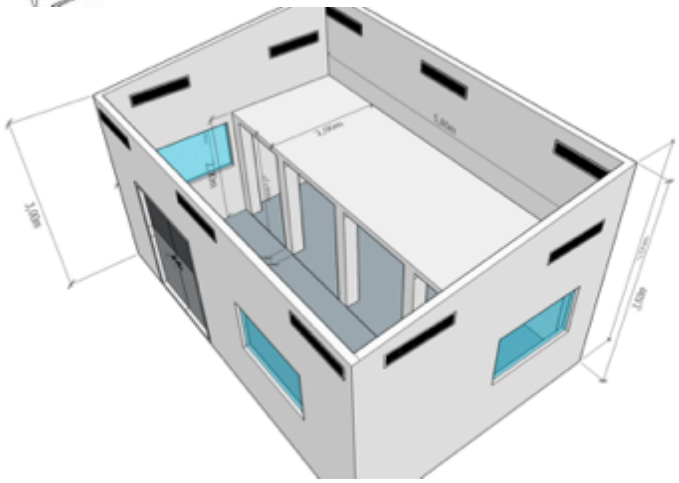
- The knowledge transfer is a priority for SFW.
- The concept includes complete specifications, clear procedures, legible instruction manuals.



Adapted user guides

A simple structure and friendly procedures





Adaptability: transport, solar, modular production

The Business Models

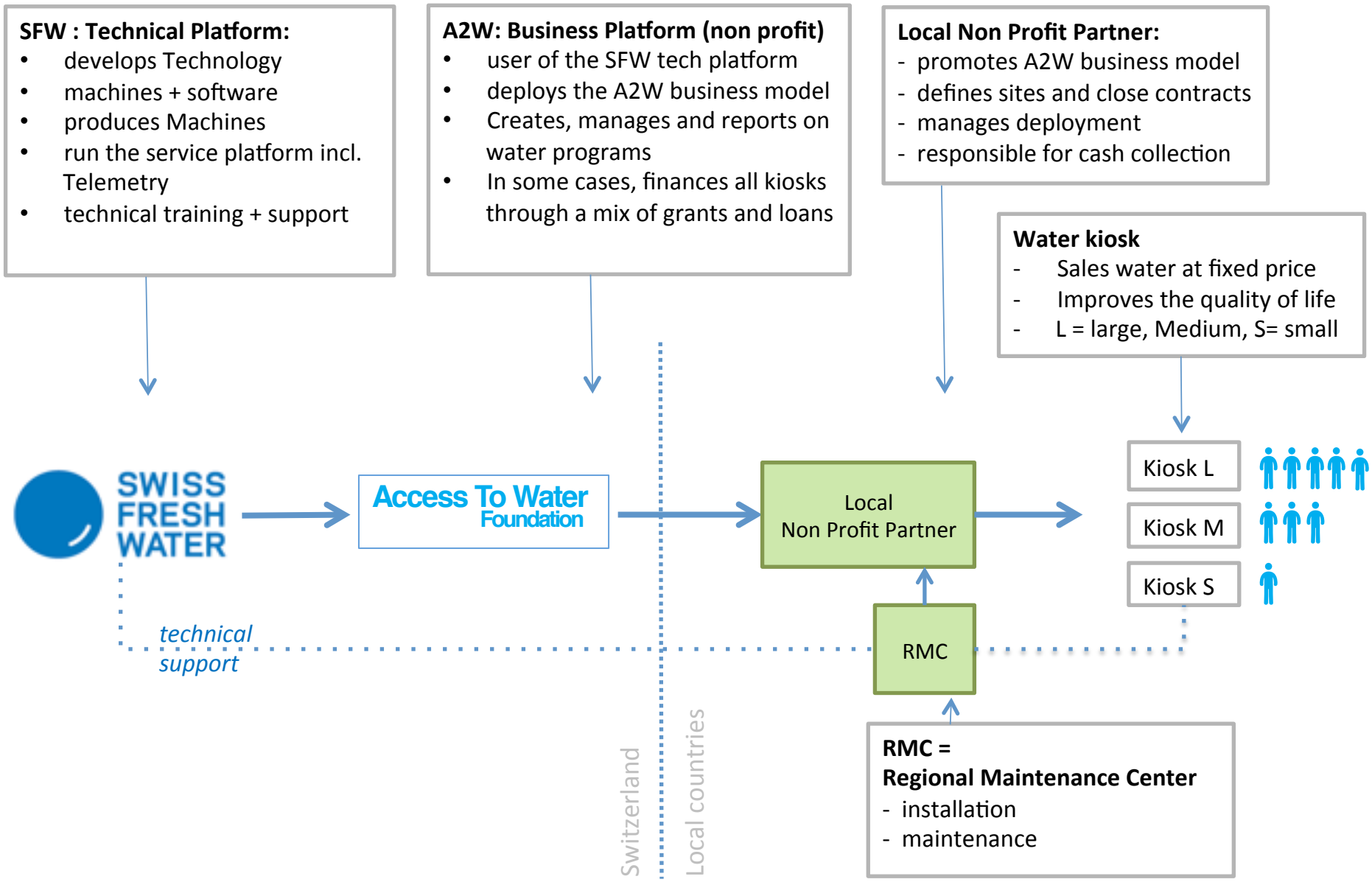
Swiss Fresh Water (SFW)
as a tech platform

Access To Water Foundation (A2W)
as a business platform

A transversal project

Health:	**Economy**:	**Education:**	**Social Cohesion**:	**Environmental**:
Improvement of the health of populations (decrease in diarrhea, fever, parasitic diseases, etc.). Decrease in problems of kidney, mental and cases of cancer for people drinking water contaminated with heavy metals.	Creation of many workplaces by water kiosks and the possibility of a financial margin for community projects.	transfer of knowledge: - social responsibility - Gouvernance - Management - Technician - Waterman - Servieman - Commercial - Administration - Hygien	Give a project to villages, youth, improve student attendance in school by fighting against absenteeism	Reduction in CO2 emissions (petrol), use of solar panels, fuel cost savings, for transportation and generators.

A win-win along the value chain



The A2W business model of a kiosk (# 1 & #2)

The business model in Senegal :

- The foundation owns the facility
- Installation is entrusted as a franchise
- After 7 years the foundation and partners decide if the ownership is given to a local non-profit structure, if they can comply with the transparency imposed by the A2W operation model and social responsibility governance

- **The kiosk sells water** to the population at a fixed price (from 0.15 cent$ to 1.5 cent$). The decision is taken with local authorities

- **A % remain to the kiosk to pay**
  - ✓ Local salaries
  - ✓ Local charges
- **A % goes to the Foundation:**
  - ✓ % Maintenance & assistance
    - Spare parts, local service, monthly cleaning,
    - Help service in 48h
    - Technical support from Switzerland, help line
    - Technical education & kiosk management
    - Villages Equalization between small and big villages
  - ✓ % Mutualisation fund, risk pooling
  - ✓ % Financing the equipment and new equipment in other villages

Conclusion

Why are we still alive after 5 years?

The team

- Impatient, obstinate, passionate and super voluntary team, EFFICIENCY oriented
- Respecting each element of the value chain, from the first hour investor to the end user
- Fight to have the financial resources to assume delays

The product:

- Bottom up product => adapted to local needs
- Bottom up business model => flexible, simple

Financing the Scale-up

- It's difficult to find millions without a track record
- It's easier to find € 10,000 several times.
- Little successes breeds success (we hope)

- With 70 facilities we hope to have reached a point of no return

The solution is also adapted for big kiosk in cities and creates: 3 to 8 jobs

Cash and carry or delivery at home

The solution is adapted for small villages and creates 1 to 3 direct jobs

School and healthpoint water distribution

Swiss Fresh Water Ltd

The company:

- Created in 2008,
- 7 employees in Switzerland, 7 in Senegal.

A big thanks to

- Lausanne Region, “Coup de Coeur du Jury" PERL Trophy 09,
- Department of Economy and Tourism Vaud 09 & 10,
- Foundation for Technological Innovation (FIT),
- Dr. René Liechti Foundation (Winner 2009),
- REPIC platform of the Swiss Confederation (2011),
- Swiss Bluetec Bridge (2013)
- SECO, Swiss Confederation (2014)
- REPIC platform of the Swiss Confederation (2015),

Lausanne Région
Promotion économique

Fondation Dr. René Liechti

FIT
fondation
pour l'innovation
technologique

canton de vaud

REPIC est une initiative commune de

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Secrétariat d'Etat à l'économie seco
Direction du développement et de la coopération DDC
Office fédéral de l'environnement OFEV
Office fédéral de l'énergie OFEN

swissbluetecbridge

Caritas Sénégal

actionaid

Swiss Water Partnership
committed to global water

Cleantech ALPS
Western Switzerland Cleantech Cluster

THE GLOBAL COMPACT
WE SUPPORT

Thank you!

For questions or comments, please contact :

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