

WASH IN HCF GLOBAL LEARNING EVENT KATHMANDU, NEPAL



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NOSOCOMIAL INFECTION PREVENTION IN BURKINA FASO



1. GEOGRAPHICAL

- 274 200 km²
- 19 Mio habitants
- 55% under 15 year-old
- Life Expectancy: 57

2. ACTIVITIES

- Pilot Programme (2010-2015): 26 Health care facilities
- Scaling up (2016 onward): 63 Sanitary Districts + 9 Regional Hospitals Centers (2'000 HCF)

INTRODUCTION TO BURKINA FASO HEALTHCARE SYSTEM



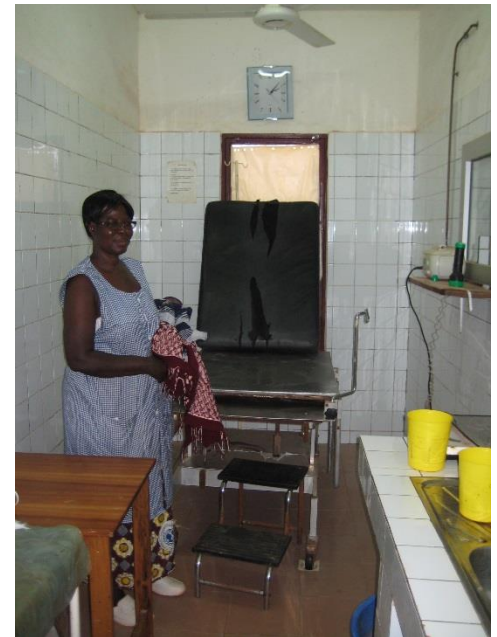
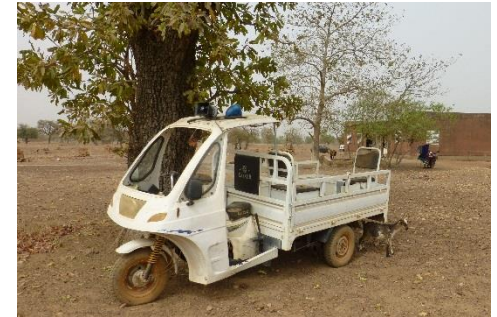
HEALTH CARE SYSTEM:

- 1st: 1'698 CSPS (rural areas)
43 Medical centers
47 District hospitals
- 2nd: 9 Regional hospitals
- 3rd : 4 University hospitals

PROGRAMME OBJECTIVES

- ✓ Improve disinfectant quality
- ✓ Improve hospital disinfectant autonomy
- ✓ Increase disinfectant use at different level of the HCS
- ✓ Increase cost-efficiency ratio

INTRODUCTION TO BURKINA FASO HEALTHCARE SYSTEM



METHODOLOGY /THEORY OF CHANGE

Intervention

- CHLORINE GENERATORS ARE INSTALLED IN 26 HEALTH CARE FACILITIES IN BURKINA (representative sampling of Burkinabe healthcare structures)

Outputs

- TRAINING on technology & hygiene practices for Ministry/other stakeholder
- MONITORING & EVALUATION of hygiene practices

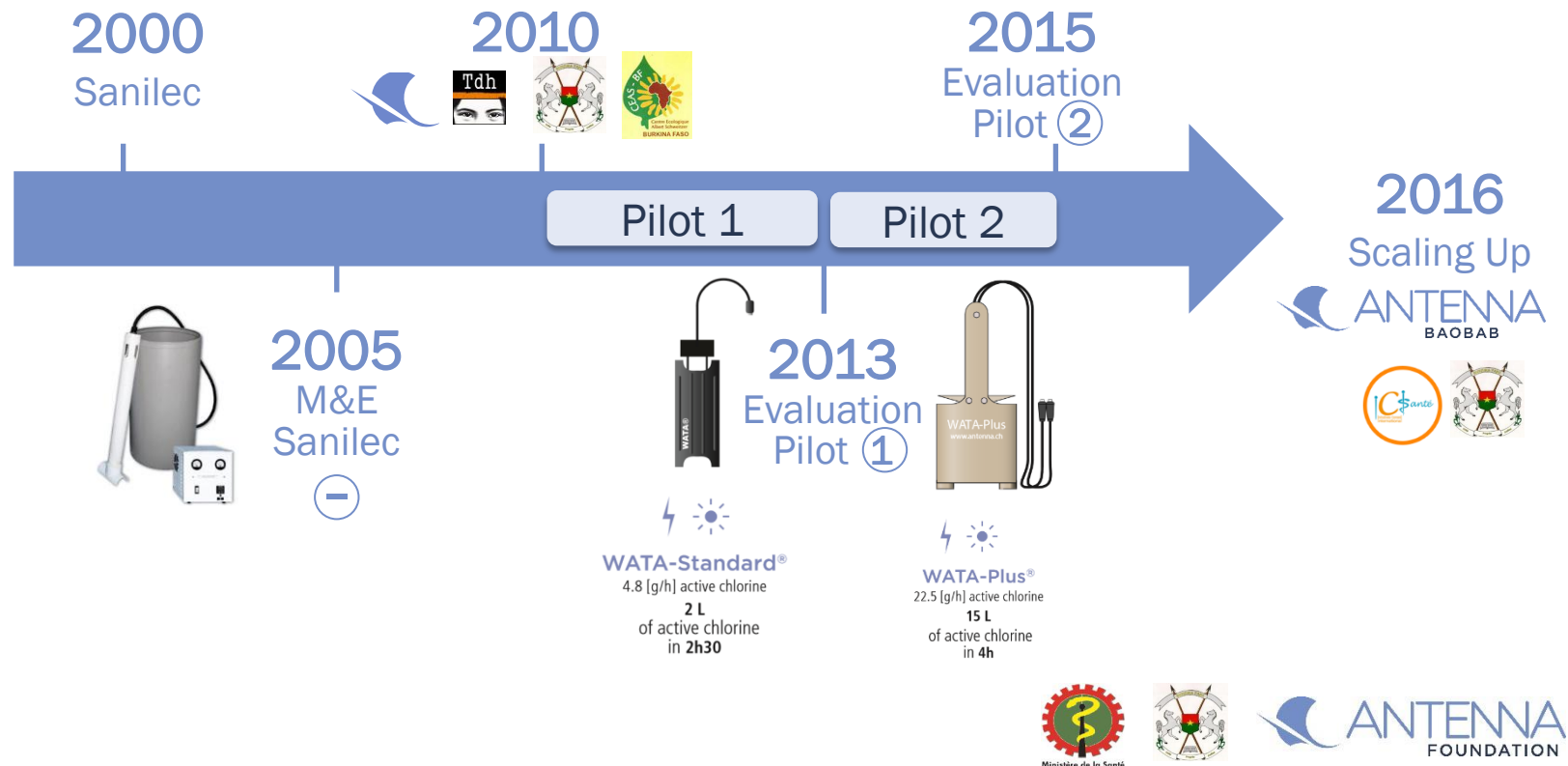
Outcomes

- AVAILABILITY of adequate chlorine volume for HCF, at cheaper price
- INCREASE USE of chlorine for disinfection purpose
- Integration of NATIONAL EXPERTISE (service provider)

Impact

- REINFORCE HYGIENE PRACTICES & PREVENTION OF NOSOCOMIAL DISEASES

IMPROVE ACCESSIBILITY, QUALITY & SUSTAINABILITY OF HEALTHCARE SYSTEM



SUSTAINABILITY RELY IN GOOD SUPPLY CHAIN, MAINTENANCE AND PEER TRAINING



PRODUCTS

INSTALLATION & MAINTENANCE

WATA
Devices

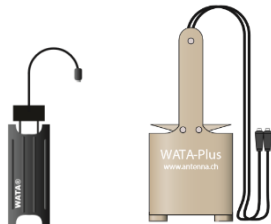
WATA
Reagents

Off-Grid
Solution

Installation

Training

M&E



WATA-Standard®
4.8 [g/h] active chlorine
2 L
of active chlorine
in 2h30

WATA-Plus®
22.5 [g/h] active chlorine
15 L
of active chlorine
in 4h

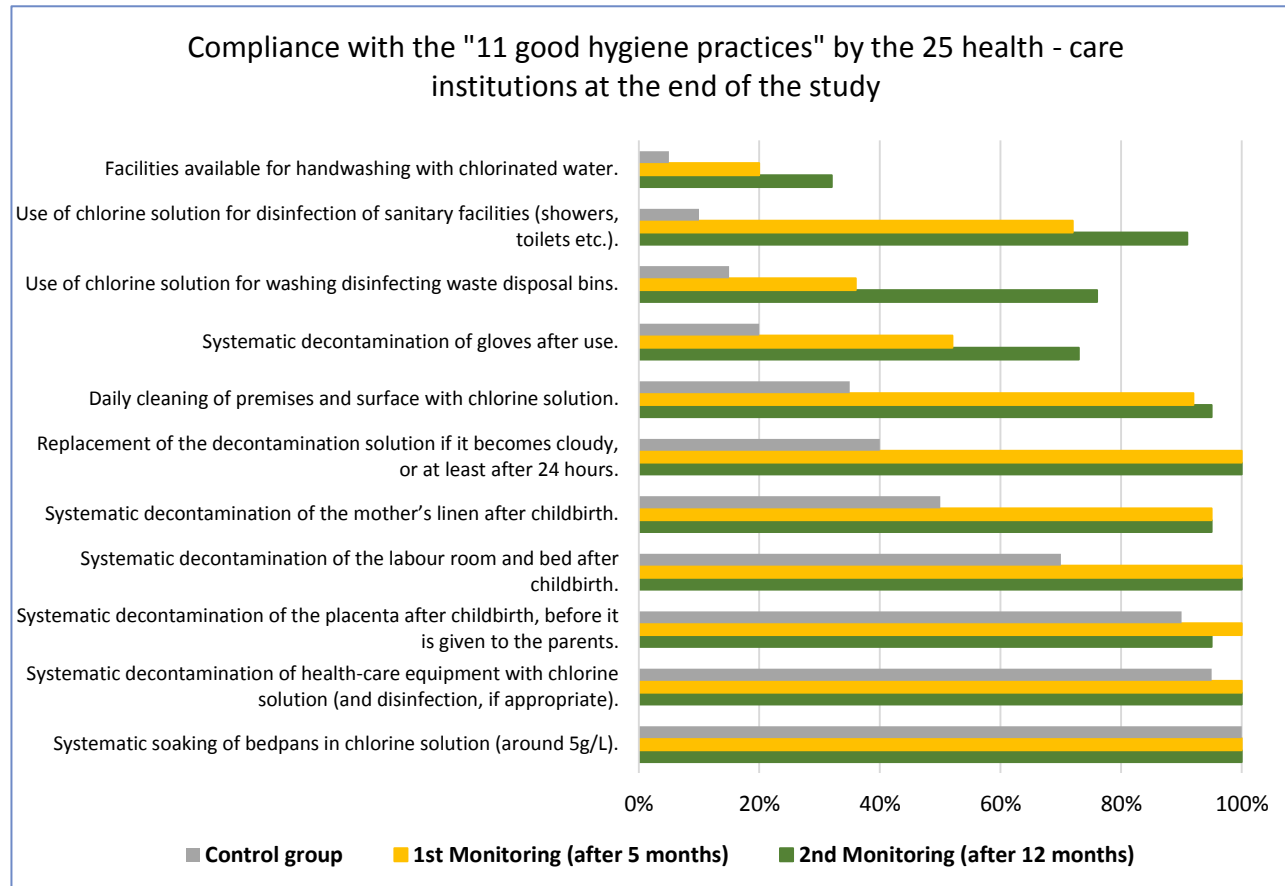
WataTest®

QUALITY CONTROL



OUTCOME 1 : HYGIENE PRACTICES MEASUREMENT

BEST HYGIENE PRACTICES

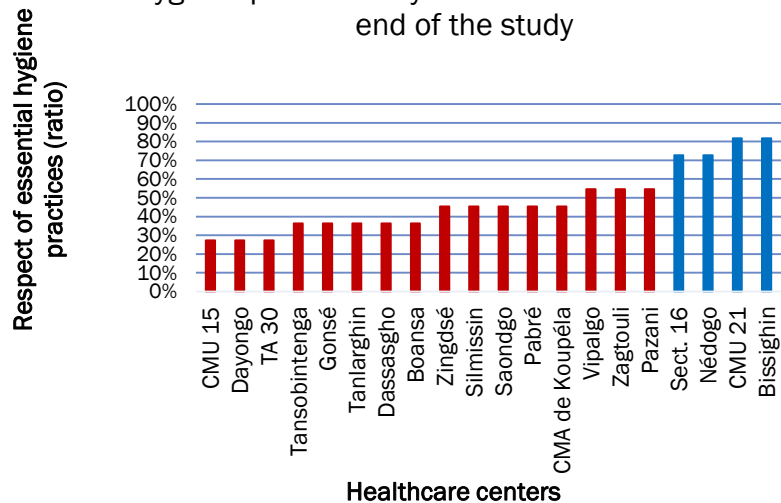


HCF
compliance/T
otal

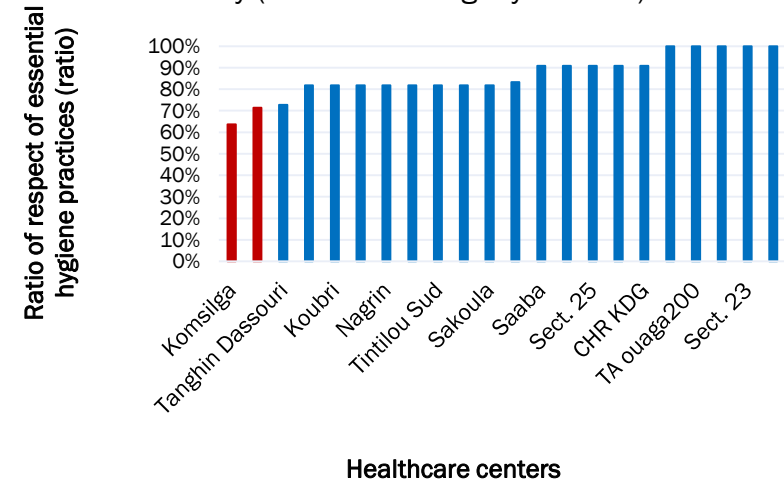


OUTCOME 2 : HYGIENE PRACTICES IMPROVEMENT

Ratio of compliance with the “11 good hospital hygiene practices” by health-care facilities at the end of the study



Ratio of compliance with the “11 good hospital hygiene practices” by facilities at the end of the study (final monitoring 1 year later)



WITNESS GROUP

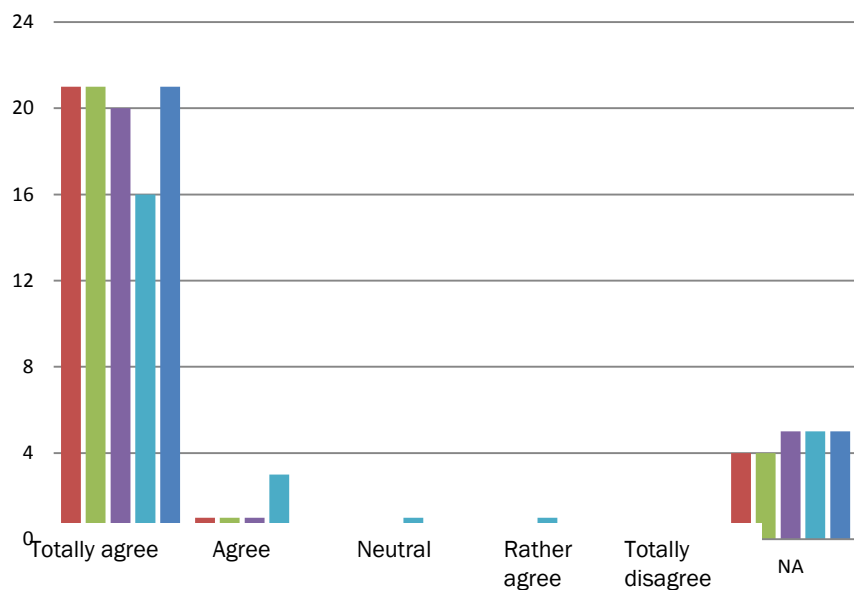
Ratio: 4/20 comply with at least 8 best practises
20% of good practises

PILOT GROUP

Ratio: 20/22 comply with at least 8 best practises
90,9% of good practises

STRENGTHS & CHALLENGES

General impression from the healthcenter staff



Are you generally satisfied with WATA ?

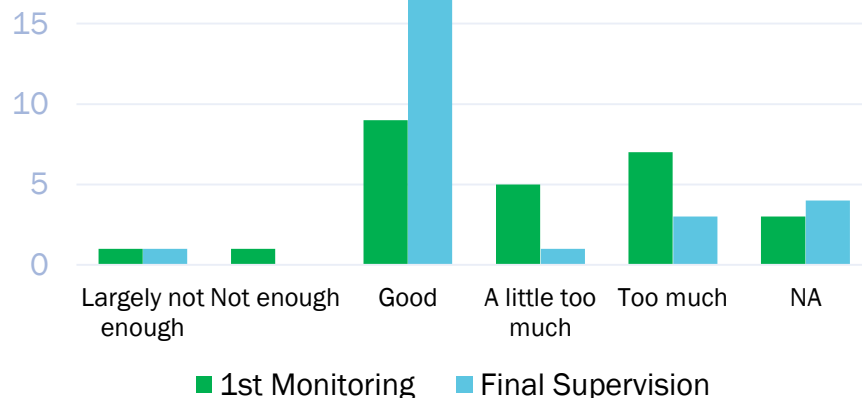
The technology is valued

Are you generally satisfied with WATA ?

The quantities of chlorine produced met the requirements

The technology helped to improve hospital hygiene

Quantity of chlorine produced by WATA compared to chlorine needs



POSITIVE FEEDBACK AT LOCAL LEVEL
Qualitative Review (26 staff of hospital)
USE, VOLUME, EFFICIENCY, HYGIENE



STRENGTHS & CHALLENGES

CHALLENGES (PILOT 1 and 2)

PILOT 1:

- Need for **larger range of device** to fit the requirements of each health center (different volume of production/ day)
- Working with **different electricity sources** (on-grid/off-grid) and develop a timer for a better use on site (more reliable)
- **Supply chain for reagents** of the chlorine concentration (quality control)
- **Staff Capacity building** is crucial

PILOT 2:

- **Consistent data monitoring** due to staff changes and displacement in the country
- Work out a **financial mechanism** to ensure maintenance fund (and ROI) on a long-term basis.

LESSONS LEARNT AND STRENGTHS

- **New range of devices** have brought alternative option for off-grid health care centers (WATA- Plus, Midi-WATA and Maxi-WATA)
- WATA devices are accepted and pertinent (**Satisfecit from the Ministry of Health 2015**)
- **Best practises** have been monitored during the phase 2 (with great improvement)



NEXT STEPS & RECOMMENDATIONS

Économies réalisées par la production du chlore avec les WATA

	par L de chlore	par production	par jour
WATA-Std	289,6 CFA	579 CFA	1 738 CFA
WATA-Std solaire	295,4 CFA	591 CFA	1 772 CFA
WATA-Plus	289,3 CFA	4 340 CFA	8 679 CFA
WATA-Plus solaire	295,8 CFA	4 437 CFA	8 874 CFA
Midi-WATA	288,0 CFA	8 641 CFA	17 282 CFA
Maxi-WATA	289,4 CFA	17 364 CFA	34 728 CFA

Note: Les valeurs "par jour" ont été obtenues en considérant la capacité du WATA-Std à 3 productions journalières, soit 6 L, et la capacité du WATA-Plus, du Midi-WATA et du Maxi-WATA à 2 productions journalières, soit respectivement 30 L, 60 L et 120 L. (Mars 2015)

Seuil de rentabilité

	en L de chlore	en productions	en jours
WATA-Std	964 L	482 prod	161 jours
WATA-Std solaire	2 284 L	1 142 prod	381 jours
WATA-Plus	4 051 L	270 prod	135 jours
WATA-Plus solaire	7 623 L	508 prod	254 jours
Midi-WATA	5 964 L	199 prod	99 jours
Maxi-WATA	6 975 L	116 prod	58 jours

Note: Le tableau indique le nombre de litres, le nombre de productions ou le nombre de jours nécessaires pour atteindre le seuil de rentabilité de chaque appareil WATA par rapport aux coûts du Burkina Faso. (Mars 2015)

SAVING REALISED

2,7 to 53 Euros per day
(compared with Aquatabs and other local
bleach products)

RETURN ON INVESTMENT

(on devices only)

Less than a year (2014)
(even for larger off-grid devices)



TECHNOLOGY INSIGHT



PRICE: 480 USD/ UNIT

NOT INCLUDING TRANSPORT TO LOCATION, SOLAR PANEL OPTION AND TRAINING



WATA-Standard®

4.8 [g/h] active chlorine

2 L

of active chlorine
in 2h30



SHORT SUMMARY

- ✓ 90,9% of health care centers are implementing on a continuous and constant basis at least 8 best Hygiene practices (Among the “11 Hygiene best practices definition)
- ✓ 75% of health care centers have improved the disinfectant quality
- ✓ 70% of health care centers are autonomous 12 month after the pilot 2.
- ✓ Saving realized: 2,7 to 53 Eur. saved per day
- ✓ WATA ROI (return on investment) is less than 1 year



NEXT STEPS: SCALING UP!

- ✓ Building a reflection technical team (at the ministry level with local implementers)
- ✓ Health Care Programme Equipment Report (currently being drafted)
- ✓ Supply chain constraints for implementation and continuous capacity building/maintenance.
- ✓ Funding opportunities (in Burkina Faso)
- ✓ Training of health care agents
- ✓ Maintenance (preventive and curative)
- ✓ Monitoring and evaluation (FACET)



REFERENCES / CONTACT



[Geneva Health Forum link
http://ghf2016.g2hp.net/files/2016/12/P-2-07.pdf](http://ghf2016.g2hp.net/files/2016/12/P-2-07.pdf)



MERCI BEAUCOUP!
THANK YOU FOR YOUR ATTENTION



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