

# 2 with 8

Safe water for 2 bln. people with \$8 bln. so \$4/person by scaling Household Water Treatment and Safe storage (HWTS)



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The  
**SMART**  
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Group

Training the local  
private sector in  
Simple, Market based,  
Affordable and Repairable  
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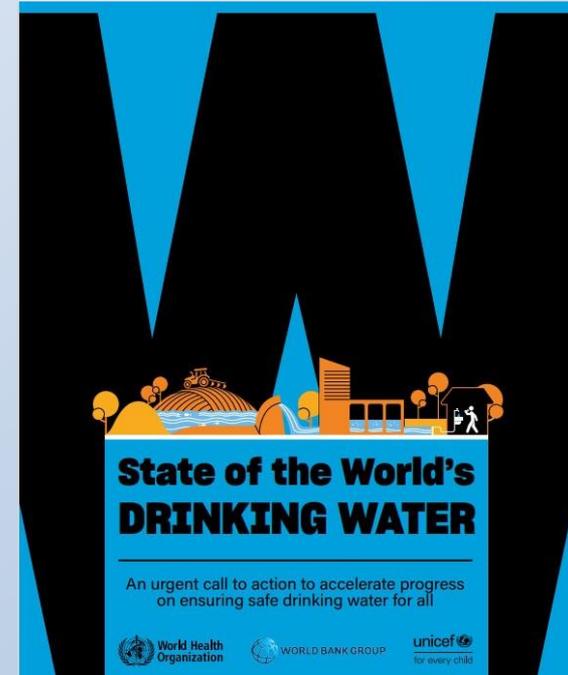
# 2 billion people use a water source contaminated with faeces

(WHO.2022)

Urban; Leaking piped systems, high maintenance cost, power cuts,.

Rural; Unimproved sources, recontamination in transport, Lack of sanitation.

Asia study; **78% of water NOT safe at point of use!!**



# Solutions

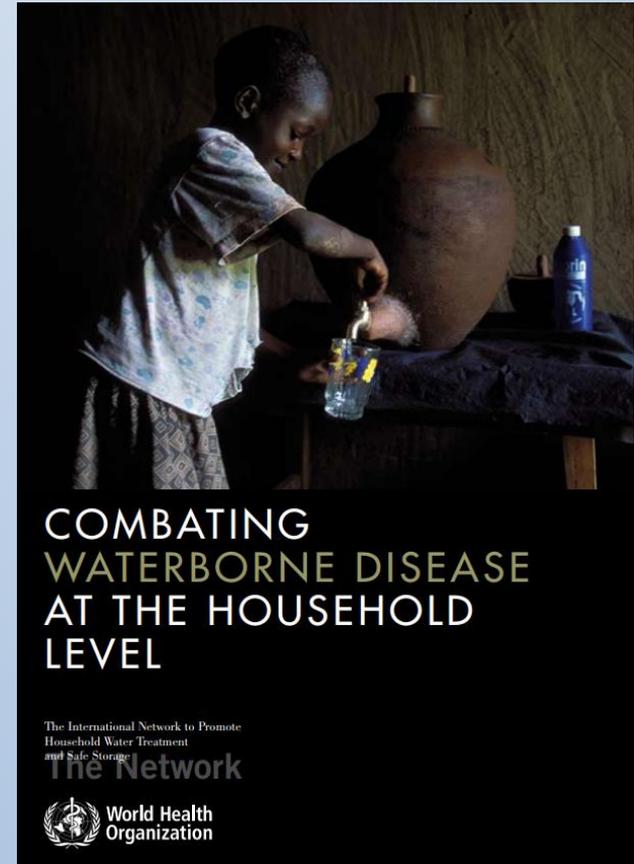
New boreholes with good seals, water kiosk,..  
CapEx (Cost) /person >\$25 and in small rural  
communities more. So for 2 bln. = >**\$50bln**

## **Intermediate solution for quality, HWTS!**

3 Cs. Correct, Consistent, Continued use of  
HWTS, reduce diseases by >50%.  
(Lantagne, Clasen, Brown, Sobsey, Wolf,..)

WHO study 2007. HWTS has benefits up to  
\$6 for every \$1 invested

**2 bln. people can have HWTS for a donor  
investment of \$8 bln. So average \$4/person**



# Many HWTS projects in 20 years

- SODIS, Local production 1 mln. potfilters, 2 mln. biosand filters, ...
- Local production filters with hi tech filter elements, Nazava, Tulip,...
- Membrane filters like Vestergaard, Sawyer, Aqua Clara, Grifaid,..
- Project in Kenya; 900.000 filters given for free. Failure, not used.
- Of options like boiling, Chlorine, UV, filters are a **Market-based product**



# Filters are a multi million business!!

- Reverse Osmosis for piped systems.
- Gravity filters.  
mlns. of Pureit filters sold,  
20 mln. Stefani sold  
0.5 mln. Nazava,.....



Why is it so profitable to sell to the rich and so hard to get safe water to the poor?

# In the marketing P's 1 was missing !!

## The P of People!!

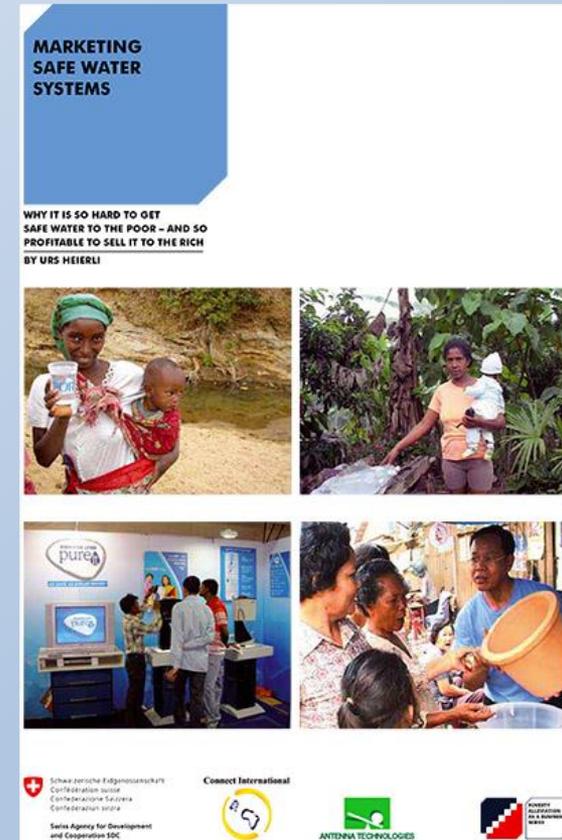
HWTS products should comply with the 3Cs,  
Correct, Consistent, Continuous use

## The other Ps are

1. **Product**; Effective, user-friendly, “must have”
2. **Price**; Range of affordable products
3. **Place**; Supply chain. 3 products in local shops
4. **Promotion**; Awareness, benefit HWTS

See the safe water “bible”

“Marketing safe water systems” U. Heierli



# Reach 2 bln. with HWTS? 3 actions

## **1. Awareness.**

Explain that clear water can be unsafe, the cost benefit, etc. That should be large scale, long term on radio, Tv, social media, schools, etc. Example Tunsai filters Cambodia  
Role for Governments, NGO's

## **2. Build supply chain + Payment options.**

Every shop that sells Chlorine also should sell min. 2 filter models  
Group credit, Pay as you go,.....

## **3. Support poorest.**

Estimated 1 bln. are really poor. They will not, can not spend a month income to buy a filter. They need a subsidy

# Will subsidies not distort markets?

Not if they are targeted. For instance, give vouchers instead free gift !  
Example. With a \$20 voucher, families get a \$22 filter in a local shop, if they pay \$2. If they want a \$32 filter, they pay \$12.

Voucher system like bed nets.

That was not perfect, but we learned

Vouchers can help to build a commercial supply chain, essential for spares, for people who can pay



# How to use \$8bln. ; who should pay?

## Use of funds

- 30%; Awareness campaigns
- 10%; Supply chains, payment systems
- 60%; Support poorest, use vouchers.

## Who pays?

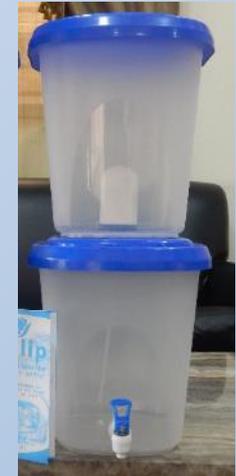
- Outcome payers
- Those interested in SDG6.1
- Carbon credits



# Breakthrough in Ethiopia

- **HWTS = Government policy**  
Part of self-supply program
- **Utilities sell water filters.**  
Those who can not guarantee safe water 24/7. Additional service. Families can pay via water bill
- **Local production**  
Filter models, starting at \$22.  
Over 350.000 filter produced
- **Carbon credits**  
Income reduce cost of filters

Initiated, funded by the NGO Aqua for All



# Recommendations

1. Adjust / Copy the model of Ethiopia to other countries
2. Make HWTS market based!. Offer options, LET users choose
3. Stop giving products!!, give vouchers
4. Form a Safe water task group, to advice governments
5. Alliance of HWTS producers. Focus on the BOP, the 2 billion, the poorest. Similar to cooking stove alliance.

# What's next?

Interested ? Become member of HWTS Network

Interested in a pilot with vouchers?

E-mail to [info@smartcentregroup.com](mailto:info@smartcentregroup.com)

Know how this develops?

See [www.smartcentregroup.com](http://www.smartcentregroup.com)



The  
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Safe water for all? Yes we can!

