

Safe water for all in Africa Pipe dream or filter reality?

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AFRICA

1 Billion people. water source with feces (who 2022)

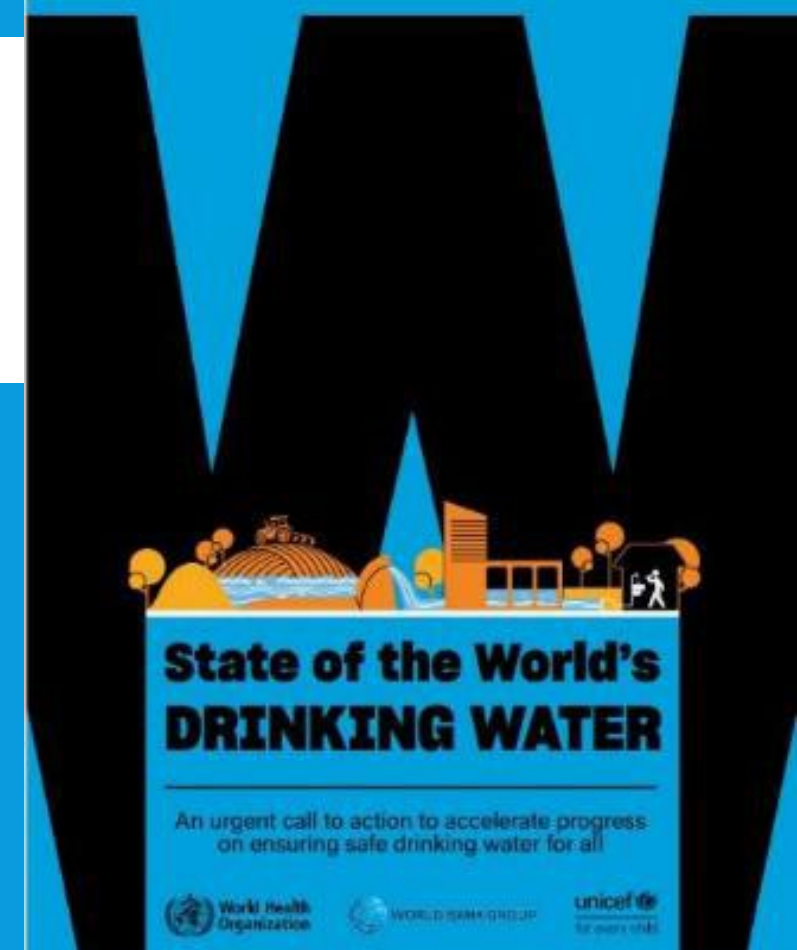
Rural;

- Open wells, Latrines near wells, ..
- >50% recontamination in transport, storage at home

Urban;

- Old piped systems, Power cuts, Water sharing...

What % of water utilities in Africa can guarantee 24/7 safe water from the tap?



SDG6.1 INDICATOR, SAFELY MANAGED

“On premises, 24/7, good quality”

< 20% of the utilities in Africa
can guarantee this

Many know but few discuss it

So



A SOLUTION? HWTS

Household Water Treatment and Safe storage

Reduces waterborne diseases with >50% if used with the 3 Cs, Correct, Consistent, Continuous use

\$5- \$60 benefit for each \$1 invested (WHO 2007)



COMBATING
WATERBORNE DISEASE
AT THE HOUSEHOLD
LEVEL

The International Network to Promote
Household Water Treatment
and Safe Storage

The Network



**World Health
Organization**



WHY DID HWTS NOT SCALE?

Failures

Chlorine? People dislike taste, does not kill cryptosporidium,.

Filters? Kenya; 900.000 membrane filters given for free.

After 1 year 70% unused (IRC2011)

- No ownership
- Complicated use, maintenance,
- No supply chain for spares



FILTERS. EFFECTIVE & MARKET- BASED

Multi million business!

- Inline; Water drop, Ispring, Agua sana,.
- Table top; Pureit, Stefani, Nazava, Tulip, Sawyer....
- Used by 90% people in USA, 50% in India, <10% Africa !.

How to get this “rich mans” solution to the poor ?



LARGER FILTERS

Schools, health centres

Membrane filters

- Remove 99.99 pathogens
- Produce 500 - 1000 ltr /day
- Cost \$ 200-\$400



SCALING? INVEST IN

1. Behavior change

Awareness that clear water can be unsafe, recontamination, use,....

Large scale, via community campaigns, tv,

2. Supply chain

Sell filters in each town

3. Targeted subsidy for the poorest

0.5 bln. people are really poor, they need support

See "2with8" Commitment made at UN conference



WILL SUBSIDIES NOT DISTORT MARKETS?

Not if they are targeted

Example Malawi

Poor pregnant women get \$20 voucher. In a local shop they pay \$3 and get a \$23 filter. Similar to bednets, not perfect but we learned

Vouchers build commercial supply chains, essential for spares, for people who can pay



SAFE WATER WITH FILTERS , \$4/PERS

Example; NGO "Water by Women"

- In 48 countries since 16 years, high quality membrane filter
- 1 filter for a "Water Women", shared with 3 families
- Filters function after 15 years
- Cost filter + training, \$75 / 20 people = \$4/person

Cost 1 billion people in Africa, \$4 billion

2% of the \$250 bln. needed to reach SDG6 (AU 2025)



SCALING FILTERS? EXAMPLE ETHIOPIA

- **HWTS = Government policy**

Part of self-supply program

- **50 Utilities sell water filters**

Additional service

- **Local production**

Filter cost \$22 - \$40

Clients > 50% NGO's, 50% families

Initiated with 0.5mln. aid money



SAFE WATER FOR ALL IN AFRICA?

Go on with piped dream but be realistic, start with HWTS as intermediate solution

Actions?

- Governments could include HWTS in water safety plans
- Invest in; Behavior change, Supply chain, Targeted subsidies for the poor

Who can do this?

- Ministries of health, water, social affairs, supported by NGOs

Who should pay ?

- Governments who intend to comply with human right to water. NGOs can support



PROPOSITION

If utilities can't guarantee safe water 24/7 they should promote HWTS

If not, why not?

If so, what can you do?



INFORMATION



The
SMART
Centre
Group

- “2with8”, 2 bln. people safe water with \$8bln.
- Voucher system,
- Utility approach Ethiopia,
- Water by Women

www.smartcentregroup.com