

SMART WaSH Solutions



The
SMART
Centre
Group

*Promising options for water,
sanitation and food
for millions*



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Challenges

The main challenge to reach the rural population with clean water is to **reduce the cost** of water points and to make sure communities can **manage maintenance** of the water points.

Thirdly, the challenge is to increase the **productive use** of the water point, as a way to generate income for the users.

One option to tackle these challenges are SMART WaSH Solutions.

SMART WaSH Solutions

Low-cost, local production,
local supply chain

Simple products which can be produced locally

Market based products with a profit based sustainability

Affordable technologies offering a range of options

Repairable technologies based on local infrastructure and knowledge

Technologies of high quality

Results

- ◆ In Nicaragua over 70.000 Rope pumps have been installed of which 70% is used at family level. Research has shown a Rope pump increases the annual family income with \$220/year.
- ◆ In Tanzania the cost of a communal water point has decreased from \$4000,- to \$1500 through the use of manual drilling and Rope pumps. And over 10.000 Rope pumps have been installed of which 40% has been bought through Self-supply
- ◆ In Zimbabwe Siphon filters have been distributed during a cholera outbreak, none of the families using the filter was infected by cholera.
- ◆ In Ethiopia the government has adopted the Self supply approach as the way to scale up the access to water.

Examples of SMART WaSH Solutions



Training on the installation of a Rope pump, an activity of the SMART Centres



Dry wells can be restored with recharge options like a Tube re-charge, Cost materials \$10



New wells can be dug or hand drilled with options. Cost of well (40 m deep) \$500-\$1500



Wells can be upgraded with a well cover and a Hand pump. Cost cover and hand pump \$120



Rope pump used for irrigation, an example of productive use



Siphon filters used after the flooding in Southern Malawi

Discussion

If SMART WaSH Solutions are so good, why are they not yet used widely? Some of the reasons are:

- ◆ *Lack of awareness*, organisations and governments do not always have updated information on the technologies.
- ◆ *Simple is not easy*, an important condition for sustainability is the repairability of the technology. Also introduction of the technologies takes dedicated partners and governments and a long-term commitment.
- ◆ *Lack of training facilities and payment options*, for scaling up a critical mass is needed and Training Centres are required to showcase the technologies and train local companies.



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