

Safe water for all in Africa, pipe dream or filter reality?



Context:

The African Union estimates it will take **\$250 billion** to reach Sustainable Development Goal 6.1 so enough and safe water for all. That's a dream worth pursuing — but it will take decades. In the meantime, many children die from preventable waterborne diseases. There is an intermediate solution — **affordable household water filters**. A growing body of evidence shows that point-of-use treatment with good water filters is an effective and market-based solution for safe drinking water (Collins and Sobsey, 2025).

With \$4 billion so less than **2% of the budget needed for full infrastructure**, every African — including the poorest — could have safe drinking water. Filters do NOT replace delivery, people still need at least “basic service”, so an improved water source at less than 1 km. from home, but consistent use of filters can make water that people drink, safe.

The “**2with8**” commitment, launched at the UN Water Conference, shows the path: Safe water for 2 billion people with \$8 billion is possible with investments in

1. awareness campaigns,
2. supply chain development,
3. targeted subsidies for the poorest

Filter vouchers and utilities promoting filters

To avoid that free filters distort the market targeted subsidies can be used, like in Malawi. There pregnant women receive a \$20 filter voucher that they use to buy a filter in a local shop at \$3. In this way subsidies do not distort but build up retail networks.

The water supply utility in Addis Abeba applies “water sharing” meaning that most areas have 1 day/week water supply, so families must store water with the risk that it can re-contaminate. Other cities face similar problems. Over 50 utilities in Ethiopia acknowledged this problem and started to promote and sell water filters as an additional service. Some models of filters are produced locally and over 600.000 were sold already to water utilities, NGO's and families.

Safe water with an investment of \$4/person

The NGO Water by Women has disseminated over 200.000 filters in 48 developing countries and prove that sustainable safe water is possible at a 1-time investment of \$4/person. High quality membrane water filters are given to “Water Women” who make a commitment to share water with 3 other families. The cost including training in awareness, maintenance and a filter for 20 people is \$75. Results are a drastic reduction of water borne diseases.

Who is funding?

NGO's can support funds, but governments should invest to fulfil their duty “the human right to safe water”. A source of funding can be Ministries of Health since safe water and increased awareness on hygiene will drastically reduce the cost of waterborne diseases. In short let's go on and dream about piped water for all but also be realistic and start with filters for point of use treatment!



Examples of inline and gravity filters

References

- Collins. K. Sobsey. M 2025. Will be published by PLOS, September 2025
- Info on “2with8” and the voucher system www.smartcentregroup.com



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