THE SIMPLE, MARKET-BASED, AFFORDABLE AND REPAIRABLE TECHNOLOGIES (SMART) APPROACH FOR WATER SUPPLIES - ASSESSMENT FINDINGS

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MY OWN INTRODUCTION TO SELF-SUPPLY: Observations in uganda and later in Many other places in Sub-Saharan Africa



"Why chase the water down the hill when I can catch it at my home?"

To have a full picture of investments in WASH, I believe that we should consider household investments (HI) besides the (usual) 3Ts (Tarifs, Taxes, Transfers).

HI and the 3T's!

ASSESSMENT Published in october 2022

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Funder – DGIS

Lead implementor – IRC Consult Objective – *determine the potential of the SMART approach in reaching SDG6, and other related SDGs*'

https://www.rural-water-supply.net/en/resources/details/1081



Established

Starting up

Existing Centre on WASH Appropriate Technology - recently incorporated into SMART Centre Group

Methodology

- Documents review
- Primary data collection (Tanzania and Zambia)
 - Surveys of household (owners & sharers) & water points
 - Water quality testing
 - Focus Group Discussions
- Key Informant Interviews

Figure: African Countries with SMART Centres covered by assessment & their typology

WHAT IS THE SMART APPROACH? SMART = SIMPLE, MARKET-BASED, AFFORDABLE, REPAIRABLE TECHNOLOGIES

- Three pillars of the SMART approach
 - The use of innovative technologies, the SMARTechs
 - 2. Training of the private sector and
 - 3. Promoting Self-supply

- Examples of SMARTechs
 - manually drilled boreholes
 - lifting devices, e.g. rope pumps & solar pumps
 - rainwater harvesting systems
 - household water filters

- Focus local production, local materials & family-based management
- Reducing costs and scaling up options for community and household investments at family level





• The SMART approach is **contributing to SDG6**, and such a market-based approach can provide safe water, located at, or close to people's home.



Note that **sharing** of privately-owned rope pump sources is the norm in Tanzania and Zambia.

The survey found that privately-owned rope pumps are used by 7.5 households.

Accounting for sharer and owner household sizes, would mean that each privately-owned rope pump serves about 41 people.

Figure Accessibility: Distance to source before and after new rope pump in Zambia

• Household water supplies can **boost rural incomes** and contribute to the rural economy, and so are highly relevant beyond SDG6

Zambia – 42/119 rope pump owners (35%) reported an increase in value of their annual business



Figure: Distribution of approximate value of increase in annual business in Zambia as a result of rope pump by owners where they reported an increase

- The impact of the SMART Centres is significant, but localised
- Official **recognition** of Self-supply and **targeted subsidies** will both likely be vital to scale impacts and reach households that will be served last through other service delivery models.
- The SMART approach has potential for much wider impact but is **constrained** by low levels of funding and staffing, and insufficient working partnerships.







• Negative attitudes towards Self-supply, as well as misconceptions in the international water supply community, undermine the efforts of the SMART approach and limit the impact of other market-based approaches or efforts to support Selfsupply.

Figure: Eastern Manual Drillers drilling in Chipata peri-urban area, Tanzania (photo: Sally Sutton).





New manually drilled borehole (46)

Figure (above) Water quality in Zambian boreholes tested by the assessment at the end of the rainy season 2020

KEY RECOMMENDATIONS

FOR DUTCH MINISTRY OF FOREIGN AFFAIRS (BZ)

- Consider direct or indirect financing to scale up market-based approaches in rural WASH.
- Reflect and challenge negative attitudes and misconceptions about Self-supply within the water supply sector and invest in development of evidence and policy dialogue.

FOR SMART CENTRES AND SMART CENTRE GROUP

- Invest in proof-of-concept, awarenessraising, programme development and working partnerships.
- Consider broadening 3 pillars to five (add policy engagement & monitoring)
- Strengthen monitoring to track outcomes and the use of data (e.g. for advocacy)
- Strengthen sharing of experiences across the SMART Centre Group. Continue to review country approach with attention to life cycle and focus of a SMART Centre.

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THANK YOU FOR LISTENING!

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