Groundwater and self-supply

Matthias Saladin and Kerstin Danert discuss the topic of 'Groundwater – making the invisible visible', which was the theme of World Water Day, which took place on 22 March 2022

What is self-supply, and how prevalent it is? Self-supply refers to the provision of water through the initiatives of households themselves, usually at their own expense, and is a universal phenomenon in low-, middle- and high-income countries.

It is estimated that more than a billion people rely on self-supply sources. In South Asia, Southeast Asia and the Pacific, more than 760 million people, or 31 per cent of the population rely on self-supply for their drinking water, with numbers estimated to be increasing by more than nine million each year.

Meanwhile, in Sub-Saharan Africa, some 46 million rural and 225 urban dwellers rely on private groundwater sources, equivalent to seven per cent and 33 per cent of the rural and urban population respectively.

Q So, what is the big deal, you may ask, and why write about it here?

Well firstly, globally groundwater is the most common form of self-supply and is generally more resilient against climate change shocks than surface sources. Secondly, self-supply can improve livelihoods by allowing households to access water for multiple uses – for example for agriculture or small businesses in addition to domestic use. And thirdly, despite its prevalence, self-supply has largely been ignored by authorities, donors and implementing agencies.

It is extremely important to note that self-supply does not absolve the state from its obligation with respect to water.

So, what is needed? Well, supporting self-supply can enable public funding to reach further, and even support groups who are otherwise being left behind.

In most countries, rural economies have developed hand-in-hand with their water supplies. This process can be speeded up in weaker economies by improving the availability of affordable technologies, advisory services, microfinance, a skilled private sector, and sometimes by incentives or subsidies. The delivery of these support services can help families to ensure the quality and sustainability of their water sources largely through their own initiative is called supported self-supply.

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Q What can be done to help self-supply reach its potential?

- Water, Sanitation and Hygiene (WASH) professionals: Recognise the role of individual households in upgrading WASH service levels, support the collection of evidence on the multiple impacts of self-supply, support initiatives of market intelligence, capacity building, exchange, and learning.
- Government entities: Recognise the role and importance of self-supply (e.g., include self-supply in monitoring efforts, recognise it in policies and standards), build expertise in institutions, establish an enabling environment for local private sector actors to thrive, and build capacities.
- Academia: Include technologies and approaches adequate for individual household supply (or small groups) in research projects, include self-supply as an approach, investigate enabling and hindering factors for WASH entrepreneurs to establish a business and thrive, look into the multiple benefits generated by self-supply.
- Funding agencies: Include self-supply components in projects, focusing on kickstarting market-based mechanisms, promotion, capacity building, market intelligence, research and evaluations.
- Implementing agencies (e.g. NGOs, UN agencies): Integrate self-supply components in projects of WASH, rural development, market development and livelihood improvement; pilot and showcase technologies that can be taken up by individual households and small groups.
- Private enterprise: Explore business opportunities and seek out training in relation to water supply provision for households, while being mindful of any regulatory requirements. Through professional associations, engage in dialogue with government entities and WASH professionals to find the most appropriate ways that local businesses can contribute to increasing access to water for drinking and other purposes that are funded by households themselves.

This is extracted from *A World Water Day 2022 Factsheet on Groundwater and Self-Supply* compiled by Matthias Saladin (Skat Foundation), Tara Bartnik (WaterAid), John Butterworth (IRC), Vincent Casey (WaterAid), Kerstin Danert (Ask for Water GmbH). Jenny Grönwall (SIWI) and Tim Foster (Sydney University).

The full document can be accessed at: https://skat-foundation.ch/groundwater-and-self-supply-there-is-more-to-it-than-meets-the-eye

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