BANGKOK
Climate Resilience Pathways:
Water Security and WASH in Asia Pacific

Globally, more than 1 billion people rely on private wells – a commonly overlooked source

Estimating the global extent of groundwater self-supply



Background

- Self-supply is a model in which individual households own and manage their own water supply.
- Self-supplied water is unregulated, often ignored by policy, and poorly understood.
- Despite its importance, the global extent of self-supply has not been quantified until now.

Methods

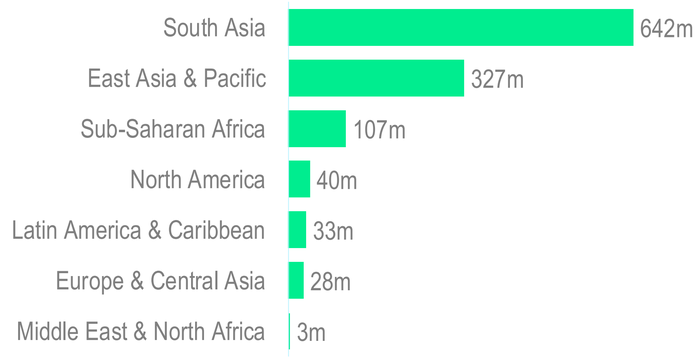
We analysed national surveys and government data from 127 countries to estimate the global extent of groundwater self-supply (i.e., private wells).

Findings

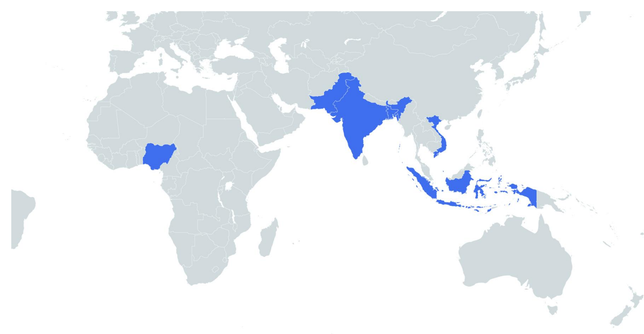
1 1.2 billion people, or approximately 1 in 6 households worldwide, rely on private wells for their drinking and domestic water needs.



2 Most private well users are in middle-income countries, with over half located in Asia.



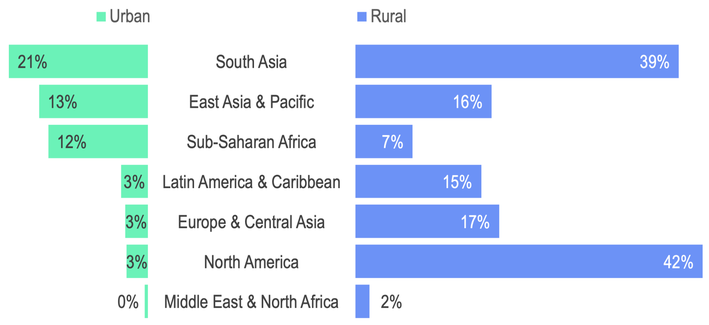
3 Six countries account for 850 million private well users: Bangladesh, India, Indonesia, Vietnam, Pakistan & Nigeria.



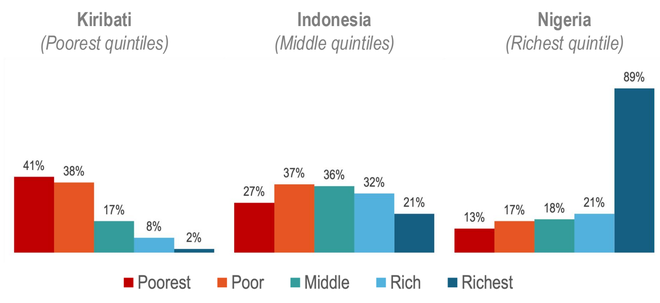
4 97% of private wells globally are 'improved' sources like boreholes, tubewells, or protected dug wells.



5 Private well use is predominantly rural, except in Africa where urban usage is more common.



6 The relationship between wealth and use of private wells varies



Way forward

Despite the significant contribution of private wells to household water security, key evidence gaps remain, particularly around **service levels**, **policy and regulation**, and **future trends**.

Service levels
Are private wells a viable option for achieving safely managed water services?

Policy and regulation
How can policy and regulation maximise the opportunities and minimise risks of private well use?

Future trends
What do mega-tends (e.g. rural electrification, national targets) mean for private well use in the future?

To find out more, visit the RECHARGE project webpage – https://www.uts.edu.au/case-studies/recharge

or scan the QR code below


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