

# 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.

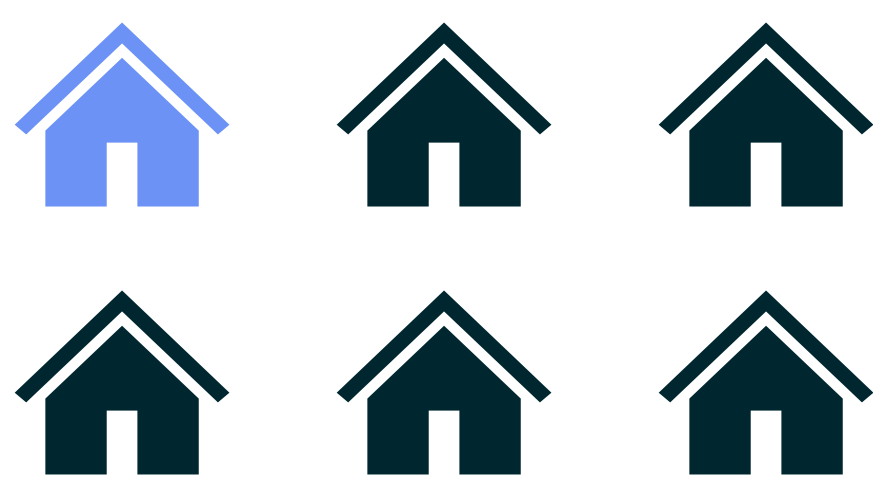
### Methods

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

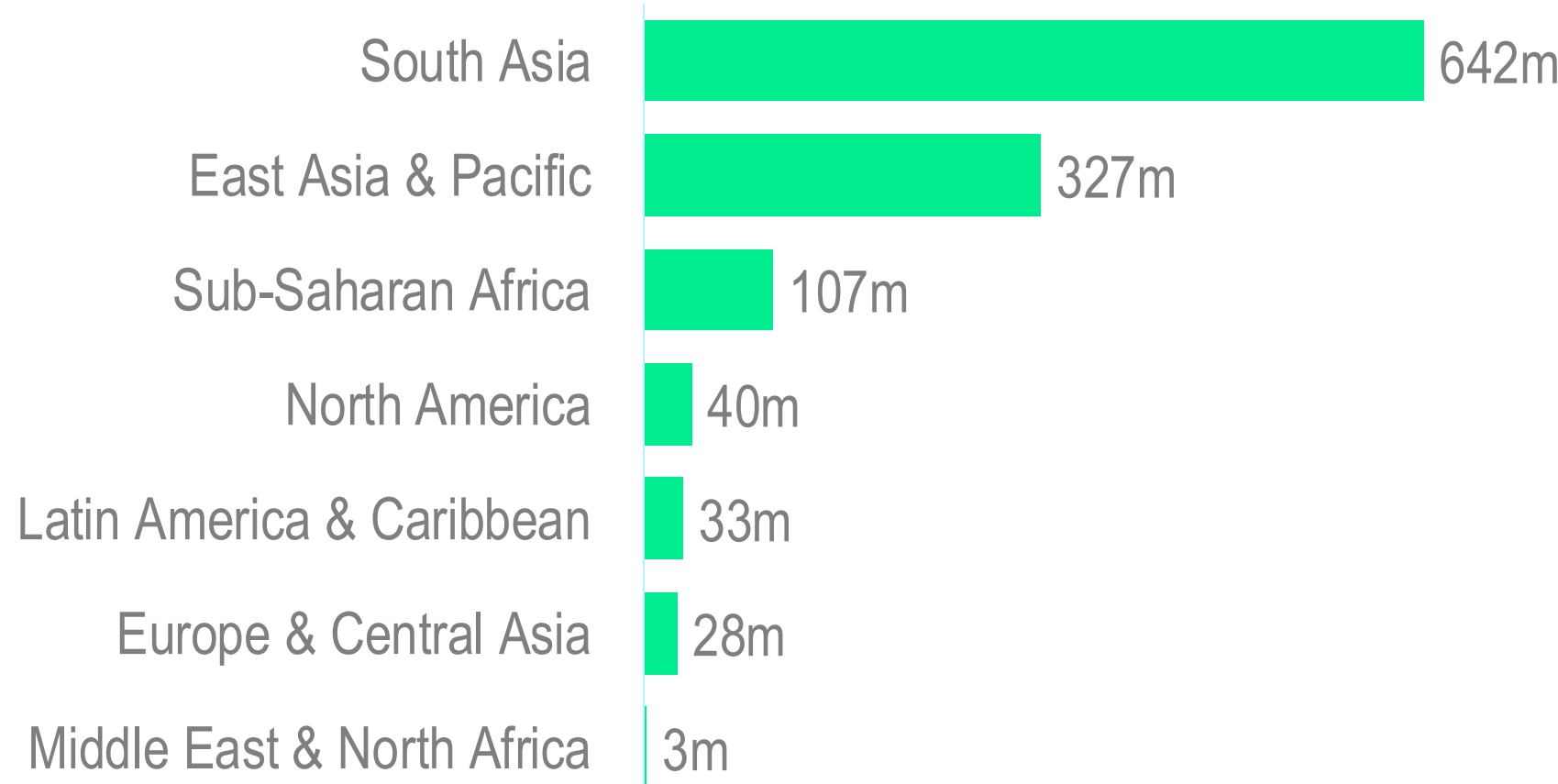
### Findings



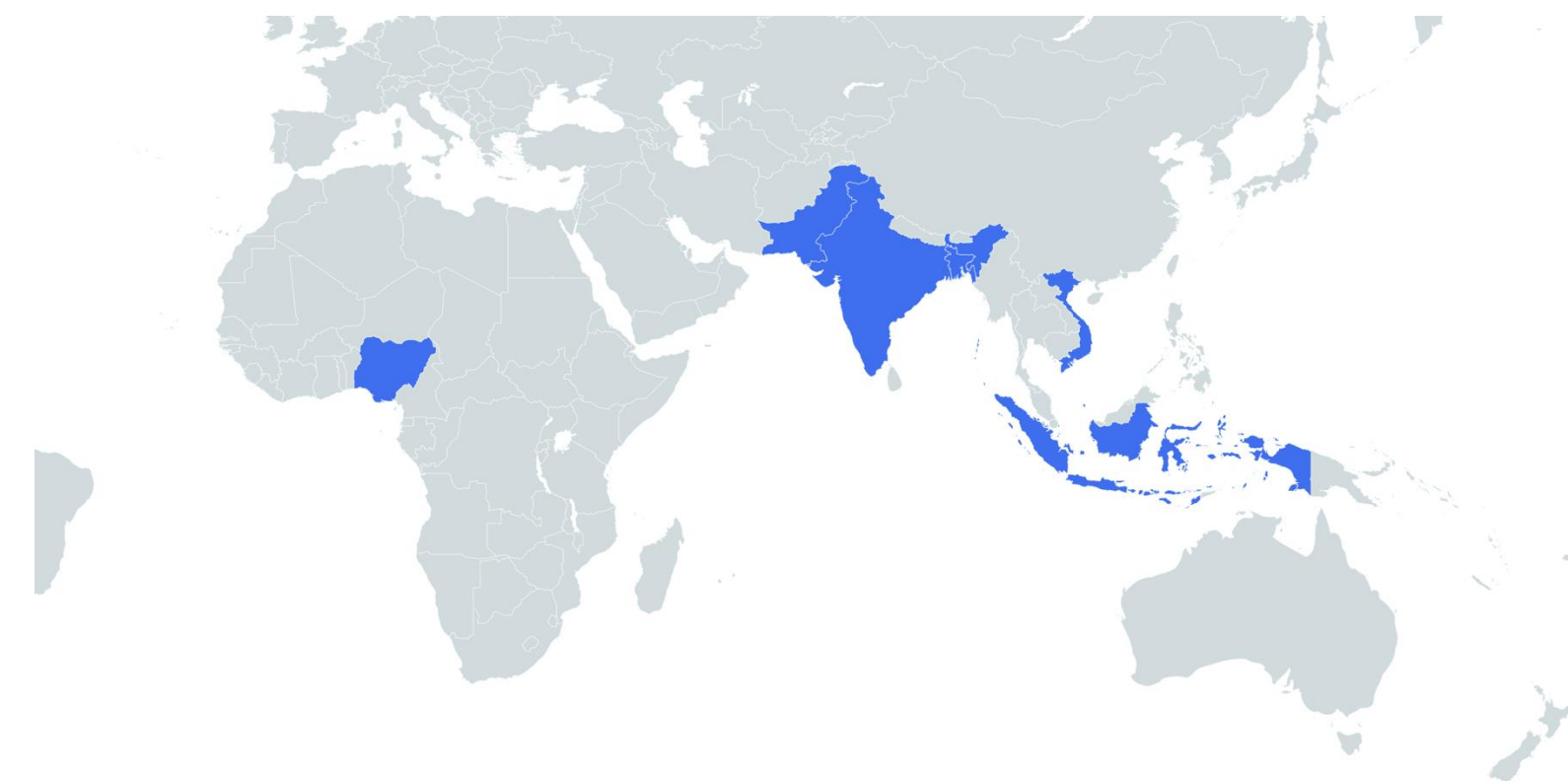
**1** 1.2 billion people, or approximately 1 in 6 households worldwide, rely on private wells for their drinking and domestic water needs.



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



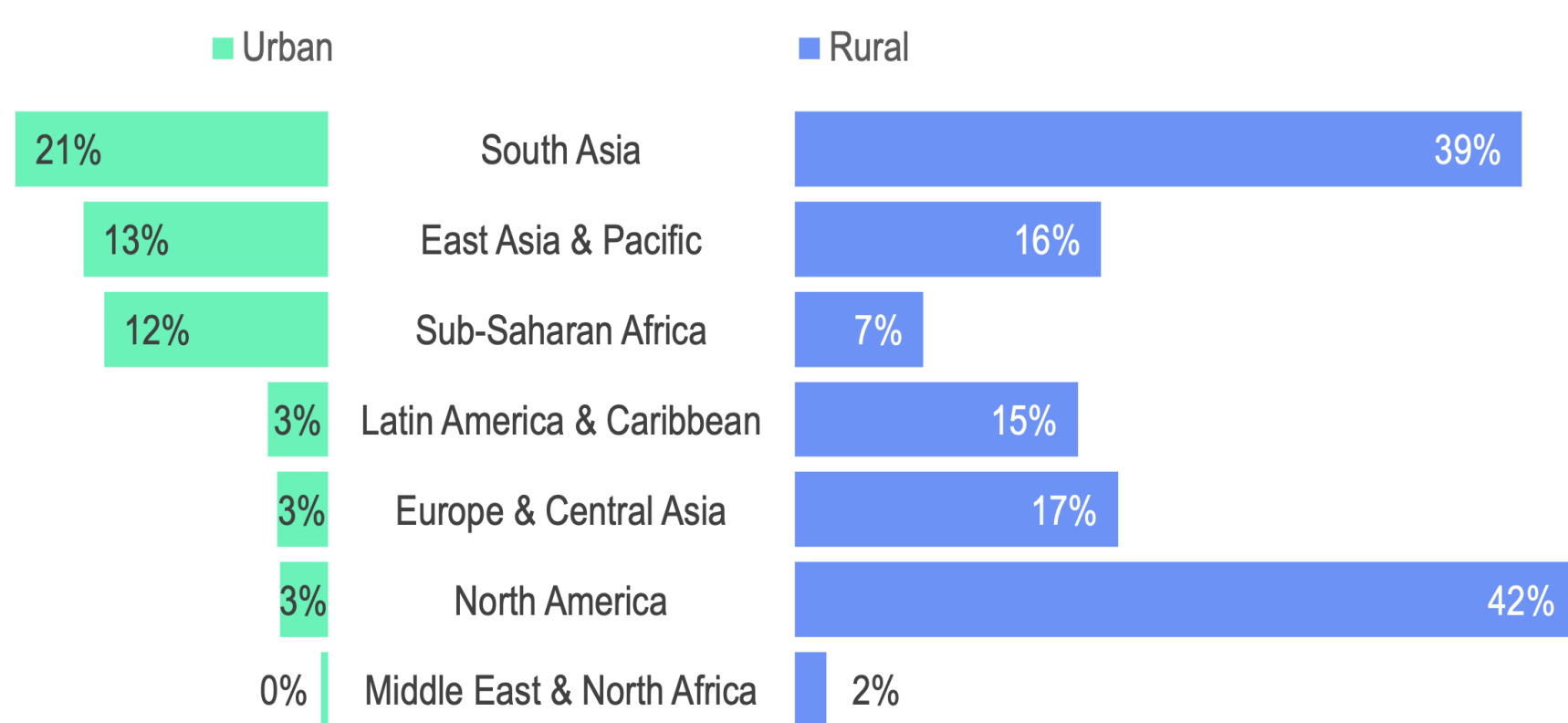
**3** Six countries account for 850 million private well users: Bangladesh, India, Indonesia, Vietnam, Pakistan & Nigeria.



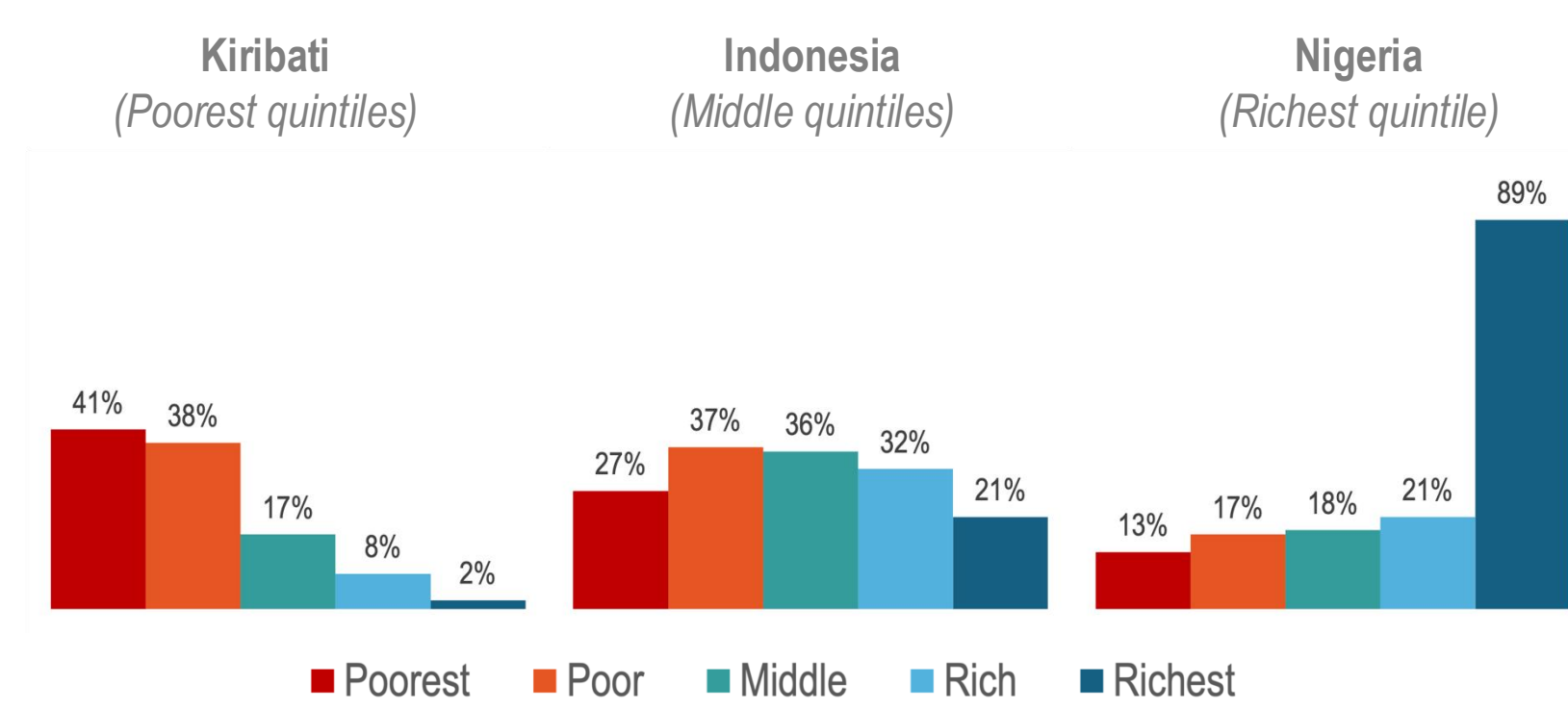
**4** 97% of private wells globally are 'improved' sources like boreholes, tubewells, or protected dug wells.



**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**.



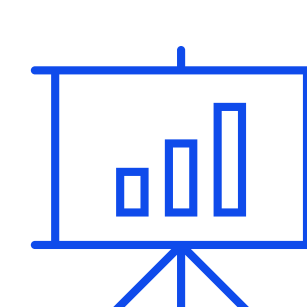
#### Service levels

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-trends (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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