

Assessing the affordability of water services for residential consumers in South African municipalities

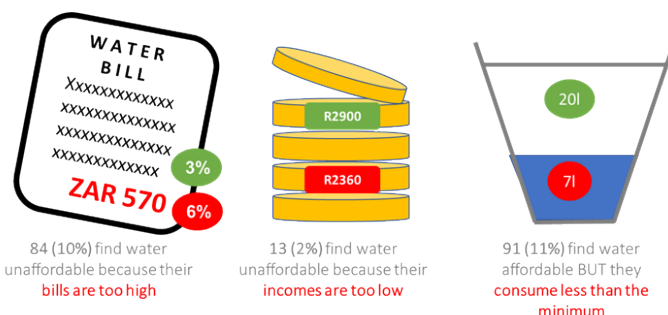


The affordability of water is currently not well understood by municipalities, who are tasked with supplying this service. Tariffs are designed without fully assessing the impact that they will have on affordability. This is in part explained by limited research in the country on the various approaches for measuring and testing water affordability at the municipal level and this in turn is partly due to a lack of datasets that contain the water bills, consumption and income information required to assess affordability.

PDG developed a dataset for analysing water affordability and used the dataset to calculate affordability using multiple measures. The methodology involved spatially merged data for Census small areas (approximately 150 households) for four municipal case studies. Three measures of affordability were investigated: a ratio approach using a 3% of income threshold, a residual income approach with the upper bound poverty line as a threshold; and under-consumption (less than 20 litres per capita per day).

A key innovation of the study was matching Census 2011 data to municipal billing information contained in the SWIFT dataset for the 2014/15 financial year to produce a dataset that contains three crucial variables for understanding affordability thereby overcoming the key challenge municipality's face with testing the affordability of their tariffs.

The study provided evidence that poor households cannot afford to pay for water while most households that face no constraints are non-poor. The areas that indicated inability to pay for water either had low incomes, were consuming high volumes of water or both. In most cases, it was not the water bill that pushes households into poverty: households were already impoverished prior to paying the bill. The



findings suggest that the existing approaches to providing free basic water are failing to completely address affordability issues.

Ultimately, poverty remains a key driver of affordability constraints in the municipal context. The implication of the study is that targeting through a blanket application of free basic water is ineffective.

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AOW PROJECT:

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