



**RESOURCE**

# Drivers of Non-Revenue Water: A Cross-National Analysis

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**Author(s)**

van den Berg, Caroline

**Description / Abstract**

Reducing water losses is seen as key to sustainable water management, but turns out to be challenging. This paper applies a panel data analysis with fixed effects to assess the major drivers of non-revenue water, some of which are under the control of utilities and some of which are not. The analysis finds that the most important drivers are population density per kilometer of network and type of distribution network, which are mostly resulting from urbanization patterns which are factors mostly out of the control of the utility. Yet, low opportunity costs of water losses and high repair costs of water losses have an important adverse effect on water loss reduction. We also found that the country environment in which the utility operates has an important impact on non-revenue water levels.

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