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Happiness on Tap



**HAPPINESS ON TAP**

Facilitating the purchase of a private water connection on credit improved households' quality of life.

Featuring an evaluation by Florencia Devoto, Esther Duflo, Pascaline Dupas, William Parienté, Vincent Pons



**A**ccess to water is a critical factor in household welfare, in large part because of the well-established health benefits of a reliable, clean water supply. But it is difficult, in most settings, to separate the effects of clean water from the effects of increased quantity and convenience. A limited water supply affects the lives of the poor in many ways beyond health. Fetching water is time and labor intensive, which could detract from education or productive activities, a burden which is thought to fall disproportionately on women and children. When a family's water supply is limited or contested, it can be a source of tension within and among households. And inconsistent access to water may contribute to stress or unhappiness.

A randomized evaluation in urban Mozambique measured the impact of a program which gave households access to piped water in their homes. Households already had access to clean running water through community taps as well as to sanitation at their houses, but many households who relied on the public tap as the main source of water had to spend time going to fetch water. The local water provider, Amenda, began offering interest-free loans to low-income households to help them buy an in-home connection to the water grid. This provided an opportunity to observe how much people valued a private water connection, and how an increase in consistent access to water, with no change in water quality, changed households' welfare. The evaluation was conducted by Florencia Devoto (J-PAL Europe), J-PAL affiliate Esther Duflo (MIT), Pascaline Dupas (Stanford University), and William Parienté (UC Louvain), as well as Vincent Pons (MIT).

- **Households were willing to pay a substantial amount of money to have a private tap in their home.** Though buying a water connection nearly doubled average monthly water costs, 69 percent of households that were helped with the administrative steps to buy a connection did.
- **Because households already had access to clean water at the public taps, providing the same water piped into their homes had no effect on health.** While the quality of drinking water was unchanged, getting connected led to a substantial increase in the quantity of water used. Even though households used more water, there was no change in the incidence of waterborne illness.
- **Household water connections saved families a significant amount of time from not having to gather water; this extra time was spent primarily on leisure and social activities.** Households that were encouraged to get connected gained about half an hour per day in time that would otherwise have been spent fetching water. However, this time had no impact on time spent working and was primarily used for leisure and social activities.
- **Having access to a private water connection eased the tensions associated with using a communal tap and increased perceived quality of life.** While 16 percent of comparison households stated that they were having conflicts with family members over water-related issues and 12 percent were in disagreement with neighbors, these tensions were almost completely eliminated for those who got an in-home connection.
- **When comparison households learned about Amenda's loan offer, they were also more likely to buy a connection, but less likely than the initial treatment group, which was helped with the administrative steps.** Eighteen months after the awareness campaign, the proportion of the comparison group that had applied for a connection increased from 16 percent to 27 percent. Learning from neighbors who were part of the treatment group about the benefits of being connected played an important role in convincing comparison households to get connected.

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