

**Researchers**

Terence Johnson  
University of Notre Dame

Molly Lipscomb  
University of Virginia

**Staff**

Shoshana Griffith  
Research Manager

Grace Gletsu  
Research Associate

**Timeline**

2014-2017

**Sample Size**

235 neighborhoods (5,650 households)

**Research Implemented by IPA**

Yes

# Centralizing the Market for Sanitation Services in Accra

## Abstract

Poor sanitation in the developing world leads to major diseases, increased public health expenditures, and causes childhood diarrhea, a leading cause of mortality in children under five.<sup>1</sup> To explore how market interventions can be designed to address the unique sanitation challenges faced in developing countries, Innovations for Poverty Action is working with researchers to evaluate the impact of an information intervention on access to improved sanitation services in Accra, Ghana.

## Policy Issue

In many urban and peri-urban areas of developing countries, houses are not connected to publicly-provided sewer systems. Instead, a household's waste goes into its own septic tank or unimproved latrine pit, and the household must rely on private desludging services to empty their pits periodically. The most sanitary option is to hire a mechanized desludger who pumps the sludge into a truck and delivers it to a disposal site. In some places ([Senegal](#) and [Burkina Faso](#)) it is still common to have pits emptied manually, by either a family member or a manual desludger, and the sludge is not disposed of safely. Even in more developed sanitation markets, such as Ghana, where manual desludging is rare, toilets can go for many days without being used after they've overflowed because of limited access to desludging services. Municipalities often set prices for desludging services through negotiations between service providers and neighborhood representatives, but then often fail to enforce the regulated prices. In many areas a small number of providers holds significant market power,

with strong trade associations and high barriers to entry, allowing desludgers to keep prices high and quantities low.

## Context of the Evaluation

In Accra, the capital of Ghana, household connections to sewer networks are rare and limited to the city center. Most households, especially those in peri-urban neighborhoods, have an on-site septic tank or pit latrine, or have access to a shared public toilet. Both on-site and shared sanitation systems utilize mechanized desludging services.

The market for sanitation services in Accra is already relatively well developed, and manual desludging with a shovel or bucket is rare, but households continue to face difficulties in finding and hiring mechanized desludging providers. As a result, households may delay the service while they mobilize funds or arrange to hire a desludger, creating local health and sanitation concerns as they wait to have the desludgings completed. Residential toilets can go unused for days, putting pressure on public facilities and in some cases leading to open defecation or partial emptying of pits into open gutters along streets.

## Details of the Intervention

Innovations for Poverty Action is working with researchers to test the impact of improving linkages between desludging operators and households by making it easier for them to share information and negotiate prices for services. The study follows 5,650 households in 235 neighborhood clusters in peri-urban Accra. To be eligible for the study, households must have an on-site septic tank or latrine pit, and cannot be connected to the sewer network. Researchers randomly assigned clusters to two groups:

**Access to a call center:** 160 treatment neighborhoods (4,750 households) received access to a call center to connect them with service providers for their next desludging. The research team provided households with a sticker with the call center phone number to place on the latrine wall or nearby. They also occasionally received text message reminders in case they lost the sticker. Anyone is allowed to use the service, but it is only promoted directly to the treatment households.

**Comparison:** 75 comparison neighborhoods (900 households) continue to arrange desludging services through preexisting methods.

Researchers hypothesize that the call center will help to alleviate sanitation market failures by encouraging competition among suppliers and leveling the playing field for negotiations. The main outcomes of interest are desludging prices and service quality.

## Results and Policy Lessons

Project on-going; results forthcoming.

## Sources

[i] World Health Organization. "Poor sanitation threatens public health."  
<http://www.who.int/mediacentre/news/releases/2008/pr08/en/> March 20, 2008

June 30, 2016