

**Researchers** Terence Johnson University of Notre Dame

Molly Lipscomb University of Virginia

Staff Nicoló Tomaselli Università degli Studi di Firenze

Shoshana Griffith Research Manager

Adama Sankoudouma Senior Research Associate

Adrien Pawlik Research Coordinator

**Timeline** 2014-2017

Sample Size 4,000 households in 126 neighborhoods

Research Implemented by IPA Yes

# Sanitation Pricing for the Urban Poor in Burkina Faso

#### 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, this project will design and test alternative pricing structures and evaluate their impact on the take-up of improved sanitation services in Ouagadougou.

## **Policy Issue**

In many 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 pit, which then has to be emptied, or "desludged." A household can either pay to have the pits shoveled out manually, which often means dumping waste near the home, posing health hazards to both workers and residents, or hire a mechanized desludger to pumps the sludge into a truck that delivers it to a treatment plant. Mechanized desludgers are more sanitary, but they are underutilized. Municipalities often set prices for desludging services through negotiations between service providers and neighborhood representatives, but then often fail



to enforce the regulated prices.

# **Context of the Evaluation**

In Ouagadougou, the capital of Burkina Faso, only about 50 percent of households use improved sanitation services. Municipalities need better information on the underlying values of the services in order develop the optimal structure for prices. This project will help to collect that information and develop pricing structures better adapted at generating increased take-up of the improved sanitation services in Ouagadougou.

# **Details of the Intervention**

Researchers will use data collected from a modified auction system to analyze the underlying values and costs of desludging services in Ouagadougou, design new pricing structures, and test and evaluate their impact on take-up of improved desludging services.

They will test two different treatments by offering one treatment to more than 1,600 households and offering one other treatment to more than 1,000 households in clusters of 30 households. IPA will also survey almost 1,300 households near 40 clusters that maintain the status quo, in which they find a desludger themselves and negotiate prices directly.

Researchers predict that willingness to pay for sanitation services will increase as more neighbors are also using the service, and the study is designed to measure such "spillovers" directly. Neighborhoods receiving the intervention will be located a large enough distance away from each other that effects across neighborhoods is unlikely.

The main outcomes of interest on the demand side are willingness to pay for sanitation services and take-up of the improved sanitation services. On the supply side, researchers will measure the bids (prices) for the sanitation services and quantity of sanitation services supplied at each price.

Results will be presented to municipalities in Ouagadougou.

## **Results and Policy Lessons**

Results forthcoming.

#### Sources

1. World Health Organization. "Poor sanitation threatens public health." March 20, 2008

January 19, 2015