

ACTION RESEARCH INITIATIVE

STUDY BRIEF



ACCRA PRO-POOR WATER CONNECTION SUBSIDY STUDY

SUMMARY

Ghana's urban population has more than tripled over the last three decades, outpacing the expansion of urban water infrastructure. In the Accra Metropolitan Area, fewer than 30 percent of households in low-income urban and peri-urban settlements have access to piped water services revealing equity gaps. Some of the main challenges with supplying water to low-income urban and peri-urban settlements include inadequate policy and legislative frameworks and unaffordable lump sum connection fees.

To address these equity and inclusion challenges, USAID URBAN WASH is partnering with Ghana Water Company Limited (GWCL) to understand, document and disseminate lessons from the utility's recent water connection subsidy projects implemented by its Low-Income Customer Support Department in Accra. These lessons will be used to inform future iterations of GWCL's pro-poor programs, and potentially help other countries to learn from GWCL's experience.

WHY THIS MATTERS

Increasing the extent of household on-premise water connections would improve residents' living conditions while boosting progress toward national and global development targets of universal access to safely managed water supply. To address barriers to piped water access in low-income households of urban and peri-urban settlements, **connection subsidies** reduce upfront costs for households which often poses a barrier to private water connection.

Accra's water service provider, Ghana Water Company Limited (GWCL), began piloting water connection subsidies in 2017, adding more than 16,000 new subsidized connections through 2022. Learning from this research will elucidate lessons on subsidy implementation, targeting, administration, and financing.

Key knowledge gaps include the proportion of low-income residents who benefitted (directly or indirectly), the affordability of subsidized connection fees, the impact of land tenure requirements on water connections, the ability of targeting methods to reach the poor and most vulnerable, and the barriers that specific population groups may face in benefitting from connection subsidy initiatives.

How does this research connect to USAID's Action Research Initiative?

USAID's Global Water Strategy Action Research Initiative generates evidence to improve the effectiveness of its investments in water, sanitation and hygiene (WASH) and water resources management, as well as that of programs by partner governments, other funders, and practitioners.

Under this initiative, the Urban Resilience by Building Partnerships and Applying New evidence in WASH (URBAN WASH) project is partnering with local, regional, and global stakeholders to conduct research on the enabling environment for improved city-wide water quality and sanitation. Partnerships with service providers such as GWCL will help to strengthen the evidence base for decision-making and programming in USAID priority countries.

Learn more | www.globalwaters.org/research

METHODOLOGY

The USAID URBAN WASH Technical Working Group which includes diverse WASH stakeholders from government, development partners, academia, and civil society, developed three primary research questions for the study in Accra, Ghana:



What is the larger social impact of household water connection subsidies? To what extent did connection subsidies increase water access and improve livelihoods among households in targeted low-income urban communities?



What are the financial implications? To what extent did the subsidized connections impact GWCL's revenue collection efficiency? How much funding would be required to expand and sustain the program citywide (or nationwide)? What strategies could fill the funding gap while lowering reliance on donor funding?



What strategies can aid future water connection subsidy programs? What barriers do the urban poor, particularly women, renters or marginalized groups, face in accessing connection subsidies? What barriers does GWCL face in administering the subsidy projects? How can subsidy implementation be adjusted to lower barriers and address institutional challenges?

STUDY DESIGN

This study will evaluate four GWCL subsidy projects supported by different funders. To enable comparison, researchers will match sampled communities and households that received water connection subsidies to others that did not receive connection subsidies, using characteristics such as:

- Household size
- Head of household gender, education, occupation, age
- Tenancy arrangement
- Predominant ethnicity, religion, political affiliation
- Improved water source availability

What characterizes a low-income urban community?

- Permanent residence (formal or informal)
- Unplanned layout or loss of planned layout
- Poor physical access (especially vehicular access)
- Inadequate space for basic service (e.g., water) infrastructure
- High housing occupancy
- High proportion of renters, mostly in single rooms of compound houses occupied by multiple families
- Majority low-income earners



Photo credit: The Aquaya Institute

Researchers will survey over 2,000 households, including subsidy recipients, indirect beneficiaries who gained access to piped water through a neighbor's connection, and nonbeneficiaries.

Subsidy impacts will be estimated by comparing beneficiaries with non-beneficiaries with respect to their ability to access sufficient quantities of water, including for income-generating activities, the time spent fetching water, their occupations, and their incomes. Surveys will also help characterize household willingness and ability to pay, as well as household preference for payment modalities such as lump sum versus installment payments. Interviews and focus group discussions will supplement surveys and identify barriers faced by specific population segments such as women-headed households, renters, and other vulnerable groups.

Researchers will also review secondary data (e.g., billing records, connection expenses) obtained from GWCL to evaluate the financial implications of administering connection subsidies. For example, they will assess water bill payment behaviors over time among households that received water connection subsidies.



An enumerator pilots the survey tool within low-income urban communities of Accra targeted for connection subsidies.

The research will estimate the costs for expanding the connection subsidy program to all low-income communities in Greater Accra. To support this estimate, a comprehensive map of low-income communities will be created using existing data, satellite imagery, and field-based GPS data collection. This information, while derived from Accra, will allow GWCL to estimate costs and needs for similar programs in other urban areas of the country.

REFERENCES

- 1 Twerefou, et al. 2015. <u>Willingness-to-Pay for Potable Water</u> in the Accra-Tema Metropolitan Area of Ghana. *Modern Economy* 6 (12): 1285–96.
- 2 World Health Organization/United Nations Children's Fund Joint Monitoring Programme (JMP). 2021. <u>Estimates on</u> <u>household water, sanitation, and hygiene by wealth quintile</u> <u>and sub-national region in Ghana</u>.
- 3 Franceys. 2005. <u>Charging to Enter the Water Shop?</u> *Waterlines* 24 (2): 5–7.
- 4 Training, Research and Networking for Development Group. 2020. Strategy Document for Social Connection Fund. Ghana Water Company Limited (GWCL) Greater Accra Metropolitan Area Sanitation and Water Project.

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