



# Public Engagement to Improve Water Services in Medellín

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Urban Issues

## Summary

Fighting against corruption is important to water integrity. However, the corruption focus can fall too short in explaining why the urban poor continue to be excluded from affordable and adequate water supply services. By drawing upon case study research conducted in Medellín, Colombia, this brief investigates how water integrity is perceived and experienced by low-income users in their daily attempt to secure access to water. It will be argued that promoting integrity, besides controlling corruption, needs to include user perspectives on accountability, participation, and transparency. Moreover, water utilities should better guide users on what is required of them as clients. Such an approach can help water companies create programs that are more responsive to the needs of the urban poor.

## Introduction

Water services in Medellín, Colombia's second largest city, are supplied by Empresas Públicas de Medellín (EPM, Public Enterprises of Medellín), a multi-utility company owned by the Municipality of Medellín to which it pays 30 per cent of its utility revenues. EPM provides water and sewerage, natural gas, electricity, telecommunication services, and solid waste collection to over four million people in the metropolitan area. The company has been praised both nationally and internationally for its economic efficiency, quality of services, and low levels of corruption, and as a model to emulate in other Latin American countries (BID, 2012).

Over the last two decades, EPM has been increasingly operating like a private company by adopting a competitive and market-oriented logic, with an institutional form of state entrepreneurial behaviour known as corporatization (McDonald, 2014). Paradoxically, while EPM registered US\$ 6.9 billion in total revenues in 2013 (Arias Jiménez, 2014) and reported 99 per cent water coverage (EPM, 2011), official statistics estimate that the same year 36,560 households were disconnected from the water services for non-payment of bills (EPM, 2013), representing approximately 5 per cent of the city's total households.<sup>2</sup>

Disconnection for non-payment in Medellín has been interpreted as a problem rooted in widespread poverty (EPM, 2013; Nuñez, et al., 2011). While this aspect is important, it fails to capture the ways in which current water policies systematically exclude low-income households from water access. This study disrupts this narrative by exposing the main difficulties faced by low-income households seeking to secure access to affordable and adequate water supply services. It addresses profound questions: Why are low-income households unable to pay their bills? Which difficulties do they face to be reconnected legally? Why do they connect illegally despite the risk of strict sanctions being imposed by the water company? This approach analyses water integrity from the perspective of low-income users and draws lessons from their everyday struggle to secure access to water.

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<sup>2</sup> According to the 2014 Medellín census (Medellín Cómo Vamos) the city reports a total of 775,683 households. Thus 36,560 households disconnected for non-payment represent approximately 5 per cent of the city's total households. This percentage excludes households located in informal settlements where formal infrastructure is notably absent.

## Disconnection for Non-payment

The reasons for non-payment are multiple and complex. Although economic factors are important, this study illustrates how disconnection for non-payment goes beyond the inability to pay. This analysis is based on a survey conducted with 64 households in 16 different neighbourhoods in Medellín that reported high rates of disconnection from September to November 2011. This information was supported by other sources of published data, including municipal statistics, reports, and in-depth interviews with members of the water company. Results show that disconnection for non-payment is mainly attributed to the following economic and non-economic factors:

### Unaffordable Water Tariffs

The most common reason for non-payment of bills is inability to pay. Considering that 68 per cent of EPM's users are currently registered in the lowest socio-economic strata (Strata 1, 2, and 3)<sup>3</sup> (EPM, 2013), it was not surprising that lack of affordable tariffs automatically resulted in growing levels of non-payment, particularly in low-income areas as illustrated by Figure 1. From the 64 households surveyed, 71 per cent affirmed that they did not have enough economic resources to afford their bills. Some 77 per cent of the surveyed households reported living on less than a minimum wage salary (US\$ 288 per month) and a fluctuating income resulting largely from employment in the informal sector. These problems were compounded by extremely low levels of education and literacy (e.g., 73 per cent reached only the primary school level).

The majority of the surveyed households experienced not only disconnection from water, but also electricity, gas, and telephone services. Additionally, unaffordable water tariffs forced households to cut back on other key basics, such as food, clothing, education, health care, and transportation, often to the detriment of family members. Studies have documented that households located in low-income areas spend more than 30 per cent of their income on basic public services (Contraloría General de Medellín, 2003). According to the World Bank, household expenditures on basic public services above 5 per cent of monthly household income are considered unaffordable for the poor (Komives, et al., 2005).

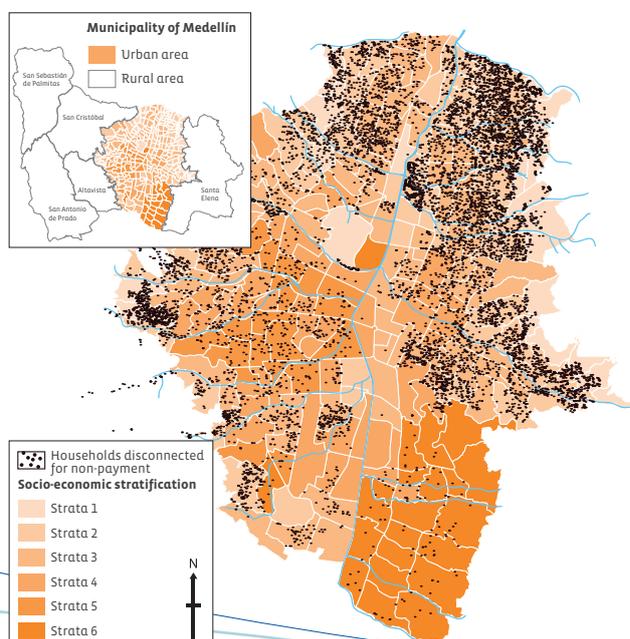
## Inflexible and Complex Payments

EPM has established diverse programs to help disconnected households pay off a portion of their debts in order to restore service. Although these programs are being designed to fit the different abilities of low-income users, they leave many low-income residents feeling helpless against their accumulated debts and simultaneously due monthly bills. The majority of survey respondents stated that they have approached EPM to arrange payments on their previous bills. However, despite the motivation to pay, they express that their actual economic conditions make paying off their debts simply unaffordable.

The findings in the survey also illustrate that a large proportion of households are unable to properly communicate with local authorities and employees of EPM. This is due to the inability to understand the criteria used to calculate bills. The billing system implemented by the company has proved to be too complex for users to understand (Rojas, 2012). Many survey respondents reported having literacy skills too low to interpret monthly consumption as well as poor debt management skills. These factors have led to numerous misunderstandings and significant mistrust between users and the company.

According to the survey, many of the households also claim that there is a lack of transparency on how tariffs are established. Seventy-five per cent of households presume that the company is charging more than it should or is charging for a service that is not being provided. In 2015, in order to overcome these communication barriers, EPM launched a new format that presents bill information contained in a way that is visually attractive (see Figure 2). Although exceeding the scope of this paper, a comprehensive study is required to evaluate the impact of the new billing format.

<sup>3</sup> Socio-economic stratification of households (Strata 1 is the lowest income and Strata 6 is the highest one).



The city of Medellín showing socio-economic strata and households disconnected from water and electricity services for non-payment (2011).

Source: Base maps supplied by Medellín's Department of Administrative Planning (Socio-economic stratification) and EPM (Households disconnected from water and electricity services for non-payment). Prepared by Juan Esteban Naranjo, 2013.



New billing format implemented by the water company.

Source: Marcela López, 2015.

## Ignorance of Legal Mechanisms

In 2010 the United Nations General Assembly adopted a resolution on the right to water and sanitation (A/Res/64/292), acknowledging that the right is legally binding and calling upon nation states and international organisations to provide safe, clean, accessible, and affordable drinking water and sanitation for all.<sup>4</sup> This international instrument represents an important basis for the Colombian Constitutional Court to derive the right to water. Although Colombian national law grants water companies the power to disconnect a household for non-payment of services<sup>5</sup>, the Constitutional Court prohibits any service provider from disconnecting a household when it is inhabited by individuals under special constitutional protection.<sup>6</sup> Low-income users are provided with officially sanctioned mechanisms such as *acciones de tutela* (tutelary actions) to hold the state and the water company accountable. This mechanism allows low-income users to directly petition any judge in the country for protection against violations of fundamental rights.

For example, in 2010 Ms. Adriana Borja filed a tutelary action with the assistance of a local NGO, three months after being disconnected for non-payment. In the claim, Ms. Borja stated that she was unemployed, and that her husband was unable to work due to an accident. She was also responsible for her unemployed daughter and her two-year-old granddaughter. She requested service reconnection and expressed willingness to enter into an agreement with the company in order to pay her debts, in keeping with her financial capacity. In her case, a judge found a violation of the constitutional right to water as follows:

*Water disconnection undermines the fundamental right to health and human dignity of the applicant and her family. The lack of adequate water services in her home might produce personal difficulties, which could trigger the deterioration of health conditions in the entire family.<sup>7</sup>*

An interim injunction was issued on 5 October 2010, ordering the water company to immediately restore the service.

This case, however, represents one of the few successful examples where, via tutelary actions, a disconnected household holds the company accountable. However, as the results of the survey show, the extent to which rights are realized depends on the level of access to legal advice and representation, which is minimal in the case of low-income users. Analysis of household survey data also indicates that involvement in decision making is very limited. The majority of the respondents replied that there is little community organization and poor participation to address their concerns about water disconnection. Many were not aware of the existence of legal mechanisms that guarantee the right to water.

Seventy-nine per cent of respondents also expressed that high levels of debt leave them with culpability and shame, even if they are able to reclaim their rights. As one respondent from the barrio Buenos Aires expressed: “Queda muy duro no pagar y encima ir a exigir derechos” (it is hard to not pay and additionally demand rights). The increasing levels of anxiety and feelings of guilt among disconnected households might be interpreted not only as concern about losing access to water, but also as fear of being categorized by the water company as “bad” and “undesirable” customers.

<sup>4</sup> For further information see: UN General Assembly, A/Res/64/292, Human right to water and sanitation, [28/07/2010].

<sup>5</sup> Public Services Law 142 of 1994 (Article 140 and Article 141).

<sup>6</sup> The Constitutional Court prohibits any service provider from disconnecting a household that is inhabited by children, single mothers, elders, and Internally Displaced People (e.g., see Decision T-546 of 2009, Decision T-717 of 2010, and Decision T-092 of 2011).

<sup>7</sup> Municipal Criminal Court decision of Medellín, 2010, translated by the author. For further information see: Republica de Colombia, Rama Judicial de Poder Público, Juzgado Treinta y Dos Penal Municipal, Medellín, “Borja v. Empresas Públicas de Medellín y Municipio de Medellín” [Juez Álvaro Diego Quintero Giraldo, 05/10/2010].

## Informal and Illegal Connections

In the absence of affordable tariffs, many users turn to different informal and illegal practices to reconnect, regardless of the strict sanctions imposed by the water company. During the first seven months of disconnection, EPM installs a trickle valve to suspend the flow of water into the house until debts are paid. In response, family members, friends, and neighbours act in solidarity to secure access to water. This includes giving buckets of water without any costs, sharing facilities such as kitchens and toilets, and reusing water (e.g., flushing toilets or cleaning floors with used laundry water). Other informal arrangements include sharing bills between households or charging per bucket of water. These solidarity practices clearly illustrate that among many users in the first phase of disconnection the intention to secure access through illegal practices is minimal. Moreover, there is a strong desire to formally reconnect to the water service.

When a user accumulates more than seven months of non-payment of bills, EPM cuts off water services. These activities are undertaken by contractors, who are often employed on a temporary basis and are unaware of the legal implications involved in water disconnection. When a house is cut off, there is not much negotiation from the user's side to halt disconnection, as many express feelings of shame for not having the means to pay their bills. It is in cases such as these that users turn to illegal connections to secure water services for their homes. EPM, in return, severely punishes illegal practices by proceeding with strict sanctions, which in some cases can lead to eviction.

Paying for illegal connections make disconnected users more prone to complex networks of manipulation and extortion. These practices become flourishing businesses after massive disconnections are undertaken. Some respondents of the survey disclosed that local plumbers are hired to remove trickle valves or to build a new service pipe connection from the house to the water main for up to US\$ 10. Additionally, many users admitted that securing access to water is becoming increasingly connected to the complex world of criminalized bands (e.g., paramilitary groups) operating in many neighbourhoods in Medellín. In some cases, these groups become the ultimate authority on who has access and who is excluded, who pays for it and who does not.

## Lessons Learnt and Recommendations

Understanding water integrity from the perspective of low-income users reveals why still billions of people are not able to obtain safe water supplies, despite technical and managerial

efforts. This is particularly important for many Latin American cities, where water inequalities are not being reduced, despite substantial improvements in water and sanitation infrastructure when compared to other cities in sub-Saharan Africa and Asia (Sponk, et al., 2012; Satterthwaite et al., 2015) and active implementation of constitutional changes to support the 'right to water' (Harris and Roa-García, 2013). Looking at the complex realities behind the everyday practices of low-income users could inform progressive ways to promote good water integrity, based on principles of accountability, participation, and transparency that take into account aspects such as equity and affordability in service delivery.

## Promoting Transparency

A crucial aspect of transparency is access to billing system information. Inaccurate information about the criteria used to determine tariff structures often leads low-income households to misunderstandings, anger, and distrust. It is therefore important to provide users with detailed information about how to interpret and manage monthly consumption, as well as establish diverse communication channels and consultation mechanisms to inform them of their duties (e.g., payment of bills, debts, and sanctions) and their rights (e.g., access to water and related legal mechanisms).

Another important aspect of transparency is the role that contractors play in the disconnection process. Contractors are often employed on a temporary basis, and are therefore often unaware of the legal implications of water disconnection. Water providers should provide training to contractors not only on consumer's duties, but also on rights. Disconnected households have the right to be informed before their house is going to be disconnected and to learn about the legal mechanisms available to prevent it. Having good legal information could also limit the interference of for-profit actors (e.g., local plumbers, paramilitary groups) in water supply provision and reduce the costs and time involved in carrying out disconnections and reconnections.

Providing access to sufficient and understandable information—not only in terms of duties but also rights—is crucial to secure better transparency. It is important that low-income users have accurate information on how their tariffs, debts, and sanctions are structured in order to strengthen their capacity to hold the water company accountable. If water providers work with intermediaries, they need to be trained to offer to users the expected level of information and transparency in their operations.

## Promoting Accountability

The right to water represents a powerful instrument to hold government and water companies accountable. However, how can enforceability be ensured? Many national governments have recognized the right to water in their constitutions and have established judicial mechanisms to protect this right when it is violated. Although legal measures are important to realization of the right to water, these measures alone do not guarantee that there will be fair implementation.

If the goal is to achieve equitable access to water, it is important that low-income users understand what the right to water means and how existing legislation can be enforced. Strengthening local organizations (e.g., NGOs, ombudsman) that work to protect the right to water is necessary to provide low-income users with legal assistance and advice. Recognizing the right to water signals that states and water companies can be held accountable, enabling low-income users to access water regardless of their capacity to pay. However, low-income users need to be informed about what the right to water means and what kind of legal mechanisms are available to secure its realization.

## Promoting Participation

To defend the interests of low-income users, it is necessary to promote spaces for participation where they can be involved in decision-making processes and work closely with water companies.

In cases of disconnection for non-payment, programs to pay debts tend to constitute the primary mechanism of information. As disconnected households fail to pay their bills while simultaneously paying off their debts, the absence of communication with the water company becomes a prevailing practice. This entails serious problems, as disconnected households tend to resort to illegal practices to restore water services. According to an interview conducted with a staff member of EPM, after disconnected households turn to illegal reconnections, it is difficult for water companies to bring them back into the formal water system. This experience shows that, in many cases, this mechanism is one-way only. Few cases can be found of users that shift from illegal connections back to regular service.

Besides payment programs, water companies should create opportunities for participation, taking inputs from low-income households into consideration and promoting exchange

with other interested groups. In Venezuela, for example, the Mesas Técnicas de Agua (MTAs, Grassroots Technical Water Committees) promote exchange between representatives of the civil society, local government, and the water company (Chavéz, 2012). So do the water forums in South Africa, where issues about payment of bills are raised (Smith, 2005). However, to ensure genuine participation, low-income users must not be treated simply as passive subjects that need to be 'informed' about what happens when bills are not paid on time; instead they might be recognized as active players capable of raising concerns, claiming rights, and discussing service-related issues.

## Conclusion

The ethical use of public services is the responsibility of every urban dweller. However, compliance with this duty becomes harder when the dialogue between users and providers is minimized and the documentation related to said services is not sufficiently clear.

Analysing integrity from the perspective of low-income users provides an innovative approach to understanding the problem of a lack of access to water, beyond economic determinism. Aspects such as complexity in bill formats, inflexible payment programs, little information on legal mechanisms to reclaim the right to water, as well as low communication skills and participation are also barriers that preclude low-income users the full enjoyment of adequate water services.

The right to water must be upheld, and it should not be denied to anyone because of inability to pay. In particular, low-income users must be supported to develop their capacity to protect and claim this right and enjoy access to water in line with their own capacities.

Understanding everyday struggles to secure access to water is key to create policies and programs that are more responsive to the realities of the urban poor. Therefore, water companies must closely cooperate with low-income users in order to understand their competing priorities (e.g., food, education, health) and create multiple payment programs and water tariffs in order to guarantee affordable and accessible water services.

## Bibliography

- Arias Jiménez, F. EPM facturó \$12,5 billones en 2013. (26 February 2014). *El Colombiano*.
- Banco Interamericano de Desarrollo (2012). Fortalecimiento institucional y de gestión de Empresas Públicas de Medellín (EPM) basado en la implementación de prácticas de gobierno corporativo. Technical notes IDB-TN-391, April 2012.
- Chavés, D. 2012. Alternatives in the electricity sector in Latin America. In McDonald, D.A. and Ruiters, G. (eds.). *Alternatives to Privatization. Public Options for Essential Services in the Global South*, pp. 452-487. HSRC Press: Cape Town.
- Contraloría General de Medellín (2003). Estudio Fiscal: Aplicación del Régimen Tarifario en los Servicios Públicos de la Ciudad de Medellín, Medellín: Contraloría General de Medellín.
- Empresas Públicas de Medellín (2011). Informe de sostenibilidad. Medellín: Grupo EPM.
- Empresas Públicas de Medellín (2013). Informe de sostenibilidad. Medellín: Grupo EPM.
- Harris, L. And Roa-García, M.C. (2013). Recent waves of water governance: Constitutional reform and resistance to neoliberalization in Latin America (1990-2012). *Geoforum* (50): 20-30.
- Komives, K.; Foster, V.; Halpern, J. and Wodon, Q. (2005). *Water, Electricity, and the Poor: Who Benefits from Utility Subsidies?* Washington, DC: The World Bank.
- McDonald, D.A. (ed.). (2014). *Rethinking Corporatization and Public Services in the Global South*. London: Zed Books.
- Medellín Cómo Vamos. (2014). Informe de Calidad de Vida de Medellín 2014. Vivienda y Servicios Públicos. Medellín: Alcaldía de Medellín. [www.medellincomovamos.org/vivienda-y-servicios-p-blicos-0](http://www.medellincomovamos.org/vivienda-y-servicios-p-blicos-0). Accessed 7 December 2015.
- Núñez, J., et al. (2011). Estudio de usuarios sin servicio por morosidad de los negocios de aguas, energía eléctrica y gas natural para identificar estrategias y políticas públicas de orden nacional, regional local. Bogotá: Fedesarrollo. [www.fedesarrollo.org.co/wp-content/uploads/2011/08/Estudio-de-usuarios-Informe-Final-EPM.pdf](http://www.fedesarrollo.org.co/wp-content/uploads/2011/08/Estudio-de-usuarios-Informe-Final-EPM.pdf). Accessed 16 October 2015.
- Rojas, J.F. UNE y EPM responden a las quejas por alzas en servicios (12 January 2012). *El Colombiano*.
- Satterthwaite, D., Mitlin, D., and Bartlett, S. (2015). Editorial: Is it possible to reach low-income urban dwellers with good-quality sanitation? *Environment and Urbanization* 27 (1): 3-18.
- Smith, L. (2005). South Africa: Testing the waters of public-public partnership. In: Balanyá, et al. (eds.) *Reclaiming public water. Achievements, struggles and visions from around the world*, pp. 159-169. Amsterdam: TNI and CEO.
- Spronk, S., Crespo, C., and Olivera, M. (2012). Struggles for water justice in Latin America: Public and 'social-public' alternatives. In: McDonald, D.A and Ruiters, G. (eds.). *Alternatives to Privatization. Public Options for Essential Services in the Global South*, pp. 421-452. HSRC Press: Cape Town.



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