

Conflict and cooperation between formal and informal drinking water service provision in Nairobi and Delhi

Introduction

Historically, cities have built their drinking water service provision based on the principle of universal coverage that relies heavily on formal piped water supply offered by a few municipal actors. However, in cities of the Global South, these formal service provision systems are often very fragmented and can face shortcomings in meeting the water demands of all urban water users, especially the urban poor.

The research [project](#) “Making the water flow Conflict(s) and cooperation between formal and informal urban water regimes in Asia and Africa” (2019-2022) was funded by the Swedish Research Council (FORMAS) and carried out by the KTH Royal Institute of Technology with partners in Kenya (Technical University of Kenya) and India (Management Development Institute Gurgaon). **The objective** of the project is to understand the conflict and cooperation between formal and informal drinking water service provision. By comparing two cities, Nairobi (Kenya) and Delhi (India), we explored how conflict and cooperation emerge with the interaction between the formal and informal water service providers.

The project aims to directly support municipal authorities, policy makers, researchers and water practitioners to better understand how the two water service systems interact and with what implications for the urban poor.



Water provided by water carts in Kayole-Soweto, Nairobi

Policy and research workshop

On the 8th of December 2022, a **policy and research workshop** was hosted in Nairobi including the participation of important water stakeholders. The workshop aimed to engage with the policy actors and identify key policy gaps in water service delivery in the Global South. The workshop was used as a platform to discuss how formal and informal water regimes can better co-exist, and to provide recommendations for better services to the urban poor and we answered three questions - (1) What kinds of policies and institutional arrangements can better support the co-existence of formal and informal water services? (2) What kinds of obstacles can prevent this from happening? (3) How do we achieve long-term sustainability and equity in the urban water system?

Key research findings of the project

1. There is a strong co-existence of formal and informal water regimes in Nairobi and Delhi, making the urban poor rely on both to secure everyday access to water.
2. Both the formal and informal water regimes mobilise comparable approaches for delivering water to the urban poor that comprise both piped and non-piped interventions.
3. The nature of conflict is dynamic and can vary significantly from place to place. In Delhi, conflicts between formal and informal water regimes were seen as subtle and rarely escalated into violence. In Nairobi, conflicts were more direct and could more easily turn to violence.
4. Despite the existence of conflict, evidence of cooperation is strong and occurs within and across formal and informal water regimes.

Policy recommendations

a) Policy and institutional arrangements

First, the recommendation is to make more efforts to include water consumers from low-income settlements in the policy process. The key policy actors need to address water users' experience with informal services in a more transparent way when designing water policies.

The second recommendation relates to improving coordination across formal-informal water regimes. This can be done by creating an apex body to improve coordination between the water agencies and create a single window grievance cell for water users. Municipal level agencies and institutions can be more correctly resourced for this kind of work, than national level institutions.

Lastly, the policy actors recommend to set-up a mechanism (such as a regulation or contract between the regulator and the water provider) to monitor the water price and quality of informal water delivery services. This can help reduce discrepancies in the pricing and quality of the water provided by formal and informal water providers.



Water provided by water tankers in
Rwata, Delhi

b) Dealing with obstacles for improving co-existence

The first obstacle is the significant lack of trust between the formal and informal water regimes. The underlying reasons for the lack of trust can relate to structural problems in the water delivery, such as corruption, that can act as a serious barrier to cooperation. Improving trust and transparency are, therefore, the key to co-existence.

The second obstacle is the lack of financial instruments to support policy implementation. Lack of financial instruments, in turn, creates risks for more political interference and short-termism. Hence including appropriate financial instruments to implement policies is as crucial for improving co-existence.

Lastly, the lack of data and water audits on actual water usage and availability in the informal settlements is a vital obstacle as it means that the actual use of water by informal means is either not recognised or underestimated. Therefore, bringing in new data on household water usage remains important.

c) Long term water sustainability

Capacity building is important for achieving long-term sustainability. A specific priority for capacity building is training local politicians (city and municipal level) on the role of different water service regimes.

A second priority area is a need to separate municipal water governance from the relatively short political cycles that take place at the national level and can possibly impede long-term sustainable water governance.

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