

Decision-making support model for water and wastewater services universalization, taking into account affordability and vulnerability issues

Summary

The research aims to develop a decision-making support model to optimize the use of public resources on water supply and sanitation, taking into account affordability, resilience, and vulnerability issues. The cost to maintain a high-quality water supply and sanitation services combined with the growing need for investment – for either resilience, universalization, or efficiency - can represent a burden on families' income, if it relies only on tariffs. In fact, the water supply and sanitation services are heavily subsidized, worldwide. Presuming that countries and municipalities have to deal with other growing and uncertain issues, the expected available budget may decrease, compelling governments to optimize the use of public resources.

The main innovation of the project is a proposal of a decision-making model for financing water and wastewater services that relies on affordability evaluation, and tariff structure optimization. Based on case studies, the project intends to achieve the following outputs: (i) critical analysis of affordability state of art (ii) optimization of water and sanitation tariffs models (iii) development of decision-making support model for financing the universalization / adaptation to climate change of water supply and sanitation.

Keywords

Affordability, water access, public policy, decision-making model.



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