

English summary

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Universal access to water in urban areas and impact of the tariff policy – Distributive analysis in Manaus (Brazil) and Casablanca (Morocco)

This thesis highlights the inequalities of access to water supply in urban areas and measures the distributive incidence of the water tariffs, based on the empirical data of Manaus in Brazil and Casablanca in Morocco. In both contexts confronted with acute urban poverty, the investments required are such that they cannot be financed by the water users only. The empirical analysis of a 31,5% tariff increase applied in January 2004 to all the water network users of Manaus allows the evaluation of the impact on water consumption and on bill recovery. The price-elasticity estimated using a Difference in Difference method stands between -0.38 and -0.58 according to the counterfactual scenario considered, and is heterogeneous (-0.7 for the poorest quintile against -0.3 for wealthiest). The uniform tariff increase has further unbalanced the cross subsidy system, while pounding on the poorest households as most of them are billed according to a fixed charge. The distributive impact of the increasing block tariff structures is then examined, by simulating the extension of the water supply network in Casablanca. The distribution of the tariff subsidies, regressive until 2006 because of the exclusion of the poorest, becomes progressive once the network is extended. The second part of the approach explores the implementation of alternative tariffs by micro-simulation and shows that the free allowance of 40 l/cap.d clearly dominates all other structures in distributive terms whereas a targeting by category would improve only marginally the distribution, while generating a strong exclusion. Finally the last part provides a comparative synthesis of the preceding results and presents the results of the simulations of an extension of the water network for cities with characteristics as in Manaus, Dakar and Bamako (in terms of distribution of access to water and household size). Based on the contexts surveyed, where access to water issues are linked to urban poverty, this thesis shows that extending the water network to reduce poverty leads to tariff increase for the poorest. Increasing Block Tariffs redistributive pattern are limited due to the size of the poor households. As far as universal access to the water network is a priority target in urban areas, one might wonder if such tariff should be evaluated based on their redistributive characteristics or rather on their affordability for the poorest households.