## Water Demand Function of Residents of Delhi (India): An Empirical Analysis

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This study empirically determines the residential demand for water of the sampled households of selected localities of Delhi, thus estimating the demand function to derive price and income elasticities. The coefficients of price and income elasticities are taken as key policy variables in answering the question of "unreliability" (quantity and quality) of Delhi Jal Board's (DJB) water supply in terms of "coping costs" of meeting alternate domestic technology of procuring water by the sampled residents. The econometric estimation results reveal that residents are responsive to price changes for improved and reliable water supply from DJB.

## **I** Introduction

With the unprecedented rate of urbanisation accompanied by massive population growth, it becomes no less than a Herculean task to provide safe and adequate water to the residents inhabited, especially in the developing countries. So is the case with Delhi, a fast growing mega city of India. Clean, adequate and reliable water supply to the residents is an essential component of the basic civic infrastructure of urban settlement (*Economic Survey of Delhi 2012-2013*). The nodal agency or the central public water utility accountable for water procurement, treatment, storage and distribution, along with monthly tariff collection from the consumers, is the Delhi Jal Board (DJB). It is however, routinely criticised for its inefficiencies in residential water provisioning at the minimum norms and standards prescribed uniformly in all areas of Delhi. Urban water governance in Delhi presents an interesting study because residents in some areas enjoy reliable water supply while others are deprived of it. Residents in a better-off situation of water availability would apparently like to consume

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The paper is the outcome of the author's field work executed in selected localities of Delhi in the summer of 2012. It is primarily based on the evidence from secondary sources regarding inequitable household water availability in the areas surveyed, not compatible with the domestic water supply norms and standards prescribed by the DJB.