



Utilities Governance, Incentives, and Performance: Evidence from the Water Sector in India

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Abstract

Network utilities across the world are subject to regulation and political scrutiny. In developing countries, managing the trade-offs between socioeconomic and environmental objectives in public water and energy utilities is particularly challenging. These industries share important underlying technical and economic features. Therefore, many economic, governance, and policy lessons are transferable across these sectors. In India, the water sector suffers from mounting financial losses, lack of access, and poor quality of service. There is a dearth of literature on the multi-faceted nature of utility performance related to water utilities. We examine the socioeconomic and environmental aspects of urban water supply in India. We use a stochastic frontier analysis approach and distance functions to analyse the performance of 304 urban water supply utilities in three Indian states during the period 2010-2015. The results suggest that incentive-based economic reform and regulation would help the utilities improve their performance. More specifically measures to improve cost recovery, billing efficiency and reduce losses would help the utilities to enhance service delivery, expand coverage and induce efficiency in the sector. The results also show the dependence of water utilities on groundwater sources which is unsustainable in the long run. We highlight the need for designing economic incentives to improve the performance of utilities and enable them to achieve social and sustainability objectives.

Keywords Governance and regulation; socioeconomic and environmental performance; stochastic frontier analysis; sustainability; urban water supply in India.

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