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An Econometric Approach to Estimation of Cost of Urban Water Supply: A Case Study to Kolkata Municipal Corporation Area

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Water is a natural resource. But when raw water is treated and sent through proper distribution channels, then supplied to end users, it no longer remains a free natural uneconomic good. Rather, it becomes an economic good. Economic goods are produced out of necessity and come out of a production process. It is obvious that there must be a cost structure associated with treated water. This perspective of water as an economic good compels us to rethink about treating water as an economic good with an appropriate cost structure. Therefore, in this paper, we shall develop an econometric model for our focused area, consisting of 141 wards of Kolkata Municipal Area. This paper proposes a method to capture the financial characteristics and address the relevant concepts to create a cost structure for municipal water service. The estimation procedure is based on a multivariate regression approach and the cost function is represented by a parametrical cost function which has been used to observe the system in terms of efficiency, technology, and capacity.

Keywords: *Water Treatment, Economic good, Cost Function, Efficiency, Capacity, Multivariate Regression analysis*

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