

A Case Study on the Drivers of Household Water Consumption for Different Socio-Economic Classes in Selected Communities of Metro Manila, Philippines

Authors : Maria Anjelica P. Ancheta, Roberto S. Soriano, Erickson L. Llaguno

Abstract : The main purpose of this study is to examine whether there is a significant relationship between socio-economic class and household water supply demand, through determining or verifying the factors governing water use consumption patterns of households from a sampling from different socio-economic classes in Metro Manila, the national capital region of the Philippines. This study is also an opportunity to augment the lack of local academic literature due to the very few publications on urban household water demand after 1999. In over 600 Metro Manila households, a rapid survey was conducted on their average monthly water consumption and habits on household water usage. The questions in the rapid survey were based on an extensive review of literature on urban household water demand. Sample households were divided into socio-economic classes A-B and C-D. Cluster analysis, dummy coding and outlier tests were done to prepare the data for regression analysis. Subsequently, backward stepwise regression analysis was used in order to determine different statistical models to describe the determinants of water consumption. The key finding of this study is that the socio-economic class of a household in Metro Manila is a significant factor in water consumption. A-B households consume more water in contrast to C-D families based on the mean average water consumption for A-B and C-D households are 36.75 m³ and 18.92 m³, respectively. The most significant proxy factors of socio-economic class that were related to household water consumption were examined in order to suggest improvements in policy formulation and household water demand management.

Keywords : household water uses, socio-economic classes, urban planning, urban water demand management

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