

Determinants of Domestic Water Consumption: A Case Study in Northern Portugal

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Poster Abstract

Efficient management of water resources, in both rural and urban areas, requires a full understanding of existing patterns of water use. Water demand management has been mainly focused on meeting agriculture water demand, whereas domestic water demand is largely ignored, and household water consumption has not been thoroughly researched in the majority of the countries. The World Health Organization (WHO) defined “domestic water” as water used for all domestic purposes including consumption, bathing and food preparation [1], [5]. Information regarding domestic water consumption is vital but is still lacking. The success of domestic water demand management strategies depends on identifying the determinants, and their interaction, that influence water consumption at a household scale [3].

This paper presents an empirical analysis of domestic water consumption and factors influencing water consumption in Vila Real County, in Northern Portugal. Through a field survey, the data were collected from December 2016 to January 2017 from 245 urban and rural households in 20 parishes of Vila Real County, and determinants influencing domestic water consumption are studied. Data analysis was performed by descriptive statistics, non-parametric tests and ordinal regression, namely by comparing the two groups (urban and rural households) [2], [4].

Keywords: Survey, Domestic Water Consumption, Non-parametric Tests Analysis, Ordinal Regression.

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