

ABSTRACT

PATTERNS AND DETERMINANTS OF WATER CONSUMPTION IN BANGKOK

by

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This research attempts to extend knowledge of water demand and behavior of water use in Bangkok by using data from the database of the Metropolitan Waterworks Authority and the 1994 Water Use Survey of 500 samples in Bangkok. The study aims at improving an understanding of the Bangkokians' water demand and effects of demographic, socio-economic and attitudinal factors on behavior of water use in Bangkok. The theory of human social behavior by Ajzen and Fishbein is applied in the study.

The findings support the theory in some important ways. The future water demand is increasing depending on population increase and economic growth that increases population income. Moreover, the findings on water consumption in the Bangkok area are those at the household level. Household size and income are the important variables determining water consumption. In addition, the residential demand for water which responds to household income change is less than household size. The behavior of water use in Bangkok obtained indicates that number of population in household, household income and intention to water conservation are the important variables determining water expenditure. Furthermore, the decomposition of effects in path analysis was studied. The educational attainment of the samples, intention to water conservation, household income and household size are on the water expenditure of household.

Besides, the source of water knowledge affects the water expenditure directly. In sum, the total effect of household size on the water charge is high.

Thus, policy implication for the planners and policy-makers should pay attention to population policies such as birthrate control, migration and population density that will affect the residential water demand, including setting economic and attitudinal conditions for suitably changing the residential behavior on water use. Further investigation would be awareness of some problems such as sample size, water pressure in sample areas and pattern and objective of water use, and investigation into comparison between the conservation group and the other group and individual level analysis and other types of water use.