

## 4685572329 : MAJOR ECONOMICS

KEYWORD : Thai household demand for water supply estimation / Water Stock Index Pricing / Double Non-Uniform Tax / Income distribution / Vertical Inequity

THOEDSAK CHOMTOHSUWAN : EFFECT OF PRICING AND TAX  
POLICY ON HOUSEHOLD DEMAND FOR WATER SUPPLY AND  
SHORTAGE OF WATER SUPPLY IN THAILAND. THESIS ADVISOR :  
WORAWET SUWANRADA, Ph.D., 114 pp. ISBN 974-17-7112-6

The objectives of this study are to find out the demand for water supply in each household which are different in ability to pay and to investigate the effect of water supply pricing and tax policy on household demand for water supply to find the way to solve the water supply shortage in Thailand and also care about the effect on the inequality in ability to access the water supply resource which is the subsistence goods. Linear Expenditure System (LES) is utilized to estimate the demands. Data used for this analysis come from three main sources, i.e., the household expenditure data come from the 2002 Household Socio-Economics Survey, the commodity price data come from the Department of Business Economics under Ministry of Commerce, and the data about water supply production and consumption come from the Metropolis and Province Waterworks Authority. The commodities are divided into three main groups, i.e., water supply, food, and non-food. The households are divided into four classes, i.e., poor, almost poor, moderate, and rich.

Our results demonstrate that the price elasticities of demand for water supply in each household class are different significantly. The low income household has the price elasticity of demand for water supply more than the high income household. From the simulation results, It can be seen that the water supply pricing and tax policy using in Thailand nowadays are not effective to decrease demand for water supply. In short-term, Double Non-Uniform Tax (DNUT) policy presented in this study is effective to decrease the demand and also decrease the inequality. However, in long-term, it indicates that the mixed policy between Water Stock Index Pricing (WSIP) and DNUT is more effective to solve the water supply shortage and the inequality simultaneously.

Field of study Economics. Student's signature \_\_\_\_\_.

Academic year 2004. Advisor's signature \_\_\_\_\_.