

ABSTRACT

Semarang, one of the biggest city also the capital city of Central Java has increasing level of potable water consumption for the last 5 periods. According to the increasing of potable water consumption, it is also has decreasing of potable water consumption in percentage which is caused by some factors such as the quality of potable water which is bad and inappropriate to the cost that PDAM has established in, so that it cause the customers of PDAM have decreased the level of potable water consumption. The purpose of this research is to know about the factors which are influencing the consumption of potable water supply in Semarang especially in the east of PDAM service area.

The analysis method of this research are using ordinary least square model and descriptive statistic. The primary data is gained by interviewing to 100 household respondents of east PDAM service area. The secondary data is gained by Semarang PDAM office. The dependent variable of this research is consumption on PDAM potable water (Y), the independent variable of this research are family income (LnX1), family members (X2), the cost of substitute water (LnX3), the number of motorcycle (X4), the ownership of car (D1), the ownership of another water resource out of PDAM (D2), and the customer's perception of the quality of PDAM potable water (D3).

The result of this research shows that family members (X2), the cost of substitute water (LnX3), the number of motorcycle (X4), the customer's perception of the quality of PDAM potable water (D3) , are significant to the potable water consumption and have positive influence while the ownership of another water resource out of PDAM (D2) has a negative influence and significant to the potable water consumption. It is recommended that the instalation of potable water pipe must be developed to the area with bad ground water quality also it needs the increasing quality of PDAM potable water so that it can be drunk directly consider that PDAM is the local company which is supplying potable water.

Keywords: Consumption, Potable water, Demand theory, Ordinary least square, semi log lin-log