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Effectiveness of means used for water demand control

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ABSTRACT

The amount of water extracted for municipal, agricultural and industrial purpose has been about 36.6% of total run-off in Korea. The long-term water resources plan by the Ministry of Construction and Transport predicted approximately 340 million tons of water shortage in 2011. Based on the prediction, construction of a new dam was necessary. The Ministry of the Environment (MOE) launched the Water Demand Control Plan in the year 2000 to save 790 million tons of water to avoid construction of new dams. In 2003, the MOE evaluated the achievement of the Control Plan and declared the Plan successfully saved about 450 million tons of water per year using several means. The declared achievement has been examined using the water statistics between 1999 and 2004. The analysis has revealed that the conservation has not been as successful as declared. Actual reduction in water production between in 1999 and in 2004 was only about 116 million tons instead of 450 million tons that the MOE announced. Probably the MOE might have saved water through the Control Plan to a certain extent. However, that has not meant the budget has been allocated properly and used efficiently. Raising water revenue and substituting existing faucets for water-saving devices might not have any considerable effect in conserving water consumption. If any institute really wants to control water demand, it needs to analyze the effectiveness of all methods implemented.

Keywords: Conservation; Demand control; Leak; Water-saving devices; Statistics

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