The achievement of water management objectives based on willingness to pay for a water service fee in tidal lowlands

Abstract

The objective of this study was to estimate willingness to pay for a water service fee (WSF) in order to assess the expected achievement of water management objectives in tidal lowlands. A survey was conducted in Telang, a tidal lowland area on the eastern coast of Sumatra, involving 500 water users randomly drawn from approximately 60,000 people living in the delta. Each respondent was interviewed to obtain information regarding socioeconomic status and the willingness to pay for WSF. The data were analyzed using multiple regression to obtain the estimate of WSF and its affecting factors. Results indicated that the mean WSF was $11.40 US. With this WSF, only the improvement of water distribution objectives could expect to be achieved. Willingness to pay for WSF was significantly affected by the income of water users. Therefore, efforts to increase this willingness in order to achieve cost recovery and efficient water allocation should be directed towards the increase of income of water users.

Keyword: Water management; Tidal lowland area