Willingness to pay for Participatory Wetland Management of Kirala Kele, an Urban Wetland in Southern Sri Lanka

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Abstract

Wetlands are unique and dynamic ecosystems which provide a wide variety of benefits to the society. However, many wetlands ecosystems are threatened and already degraded due to urbanization, population growth, and increased economic activities. Kirala Kale is an urban wetland in Matara municipality and connected with the local communities and their livelihoods. Kirala kele ecosystem experienced drastic changes over time due to Nilwala river flood protection scheme. Though several efforts were made to develop the wetland but failed due to the public protests. Participatory wetland management is an approach for developing and conserving natural resources engaging local users and ensuring them to obtain the benefits. This study investigated the local people’s willingness to pay (WTP) for community based management of Kirala kele wetland. A sample of 102 households were selected from five adjacent GN divisions, using stratified random sampling and pre-tested questionnaire was administered for data collection. Iterative Bidding Elicitation of Contingency Valuation Method (CVM) used to estimate the WTP. Among the diverse benefits, 36% are extracting mangrove based forest products, 26% are involving in several recreational activities, 19% are employing in activities related to agriculture and the rest of 13% depends on other economic activities. As this land is abandoned at present and illegally using as a garbage dumping site and a place for anti-social activities. Hence, local communities (100%) agree to develop and conserve Kirala Kale by introducing activities of ecotourism and agro-tourism while maintaining it as a wetland park. Their main concern is to establish bird-butterfly watching towers and develop infrastructural facilities for recreational activities such as fishing, paddle boat services, jogging tracks, an education center etc. Though 28% disagreed for a payment, 62% agreed while the rest (10%) refrain from responding. Stated initial bid value was 300LKR and estimated average WTP is 136 LKR per month and annual WTP per person is 1632 LKR. Age (P=0.03) and the level of education of the people (P=0.009) has a significant (R2=0.372) positive relationship with the WTP. This study proves the potentiality of executing a participatory wetland management for conserving the Kirala kele wetland.

Keywords: Willingness to pay, Participatory wetland management, Contingent valuation method, Urban wetland